

# MATH

**35 cumulative units  
in concepts and skills**

VOCABULARY

*Math*

ENGLISH

VOCABULARY

MATH

*English*

READING

READING

MATH

*Reading*

*Vocabulary*

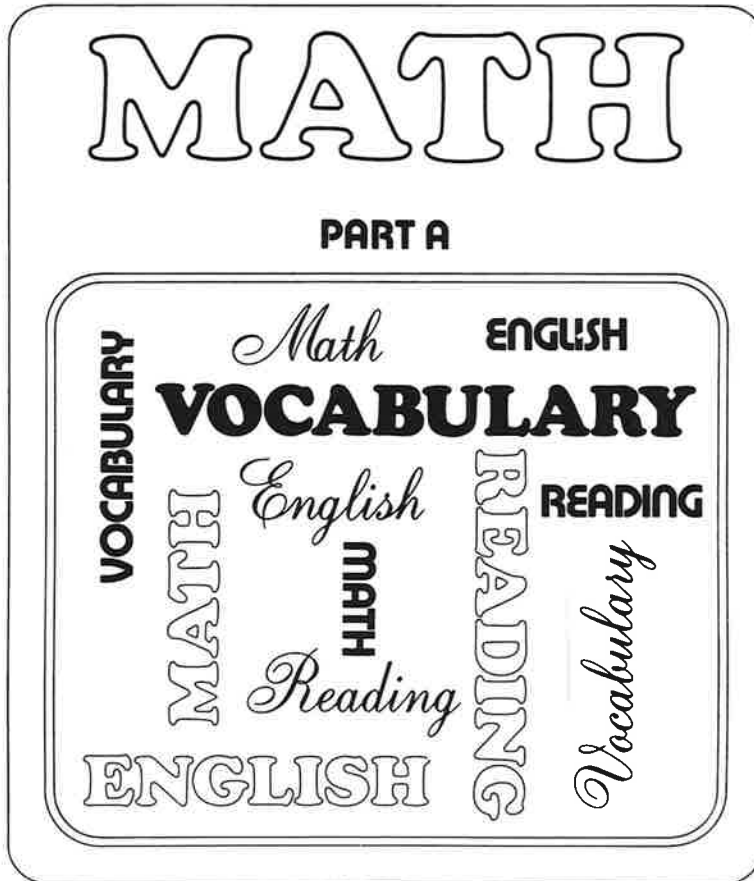
ENGLISH



**KIM MARSHALL**

# MATH

**PART A**



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## **Acknowledgments**

Without the frank comments of my students in the Martin Luther King School in Boston, this book would not be what it is today. They gave me new insights every day, and they deserve much credit for the sequence, organization, content, and breakdown of the units in the book.

Rudd Crawford, a fellow teacher of math, is responsible for the idea of the cumulative review process, which he developed in a somewhat different form in his classroom in Brookline, Massachusetts. He is also responsible for Unit 9 on Adding and Subtracting Decimals. I am grateful to him, Mary Scott, and Ransom Lynch for their ideas, encouragement, and criticism over the years.

Jeff Rubin, an editor from Educators Publishing Service, played a major role in resequencing the units, eliminating unnecessary sections, revising the review pages, and expanding and rewriting the measurement units. His ideas have greatly improved the book.

I am grateful to these and other people for their substantive contributions, and to my wife, Rhoda Schneider, for her invaluable support over the last ten years.

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## To the Student

---

*Math* is divided into *Part A* and *Part B* and includes a total of thirty-five units. This book is *Part A*. The two books cover basic skills, Roman numerals, measurement, graphing, fractions, and basic geometry. If you work carefully through each unit, you should become a better math student and should be more confident in your ability to use math outside of school.

Each unit introduces one new skill. The sequence within each unit progresses as follows:

Page one and page two teach the new material.

Page three is a review with short practice questions on all the skills learned in previous units, so you won't forget them.

Page four and page five provide more practice on new material.

Page six is a test on the material learned in that unit.

Page seven (beginning in Unit 4) is a Review Test which has one exercise which covers each skill introduced up to that point in the book.

By the end of the book, you should know the material so well that you will be successful on the final test, and that will mean you are a better math student than most people you know.

The two-part box at the top of each page is for your grade. The number already filled in is the number of questions on that page; the empty part of the box is for you or your teacher to write in the number you got right. At the back of the book is a progress chart where you can keep track of your grades on Unit Tests and on Review Tests. There is also a special bar graph on which to record your grades on these Review Tests. The top line of the bar graph indicates the level of one hundred percent correct on these Review Tests. The lower line represents an eighty percent level of achievement. You should try to keep your bar graph above the lower eighty percent line.

Good luck with these books. I hope you find them interesting and helpful.

KIM MARSHALL

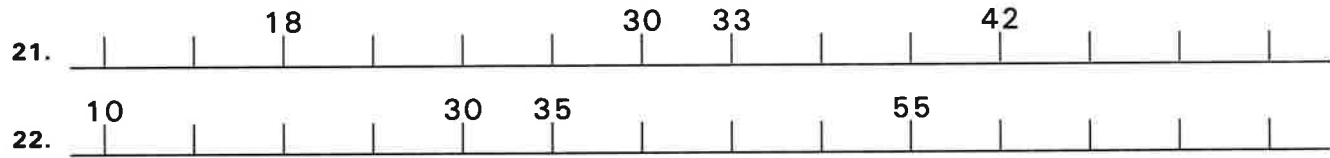
Figure out the *interval* (gap) between the numbers, and on the line fill in the number that comes next.

- |                      |                       |
|----------------------|-----------------------|
| 1. 2, 4, 6, _____    | 7. 10, 15, 20, _____  |
| 2. 6, 9, 12, _____   | 8. 30, 40, 50, _____  |
| 3. 12, 14, 16, _____ | 9. 24, 32, 40, _____  |
| 4. 21, 22, 23, _____ | 10. 46, 48, 50, _____ |
| 5. 7, 14, 21, _____  | 11. 33, 36, 39, _____ |
| 6. 15, 18, 21, _____ |                       |

Work the same way to fill in the following missing numbers.

- |                              |                              |
|------------------------------|------------------------------|
| 12. 21, 24, _____, 30, 33    | 17. 25, _____, _____, 40, 45 |
| 13. 14, _____, 28, 35        | 18. 27, 36, _____, _____, 63 |
| 14. 40, _____, _____, 70, 80 | 19. 18, _____, _____, 24, 26 |
| 15. 8, _____, _____, 14, 16  | 20. 11, 22, _____, _____, 55 |
| 16. 6, 9, _____, _____, 18   |                              |

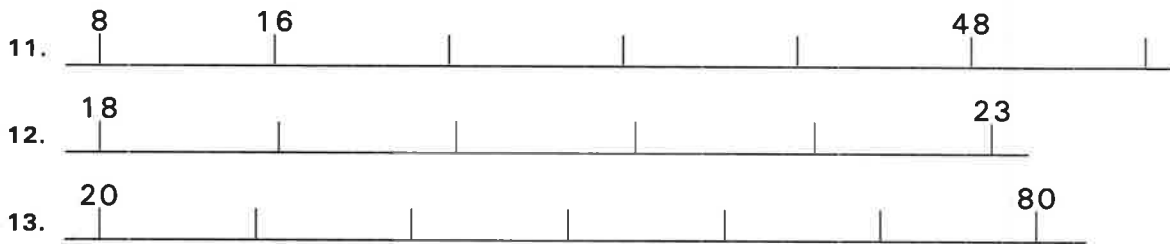
Figure out the interval, and then fill in the gaps on each of the following number lines.



Fill in the missing numbers by figuring out the intervals.

- |                      |                                 |
|----------------------|---------------------------------|
| 1. 4, 8, 12, _____   | 6. 35, _____, 45, 50, _____     |
| 2. 12, 14, 16, _____ | 7. 22, _____, 44, 55, _____     |
| 3. 14, 21, 28, _____ | 8. 12, 18, _____, 30, _____     |
| 4. 18, 27, 36, _____ | 9. 15, _____, _____, 30, 35     |
| 5. 70, 80, 90, _____ | 10. 68, _____, _____, 74, _____ |

Figure out the intervals, and then fill in the gaps on the following number lines.



First find the interval, and then figure out what *A* should be on the following number line.





In each unit there will be a *Review* mixed in with the regular work pages. The *Review* is to give you a chance to practice all the things you've learned. This way you won't forget them.

Work out the answers to the following problems.

$$\begin{array}{r} 1. \quad 85 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 10. \quad 7742 \\ - 418 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 73 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 11. \quad 9266 \\ - 149 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 96 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 12. \quad 77892 \\ + 21773 \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 94 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 13. \quad 4593 \\ 6845 \\ + 2180 \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad 297 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 14. \quad 7491 \\ 2811 \\ 4952 \\ + 2371 \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 478 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 15. \quad 88 \\ 35 \\ 92 \\ 74 \\ 35 \\ + 68 \\ \hline \end{array}$$

$$\begin{array}{r} 7. \quad 942 \\ - 137 \\ \hline \end{array}$$

$$\begin{array}{r} 8. \quad 264 \\ - 128 \\ \hline \end{array}$$

$$\begin{array}{r} 9. \quad 9471 \\ - 215 \\ \hline \end{array}$$

Figure out the intervals, and fill in the gaps on the following number lines.



Find the interval, and then figure out what *A* should be on each of the following number lines.



A = \_\_\_\_\_



A = \_\_\_\_\_



A = \_\_\_\_\_

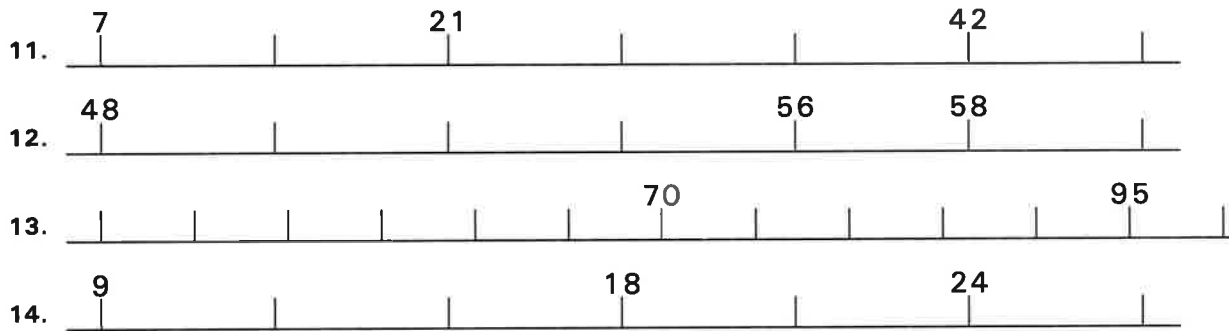


A = \_\_\_\_\_

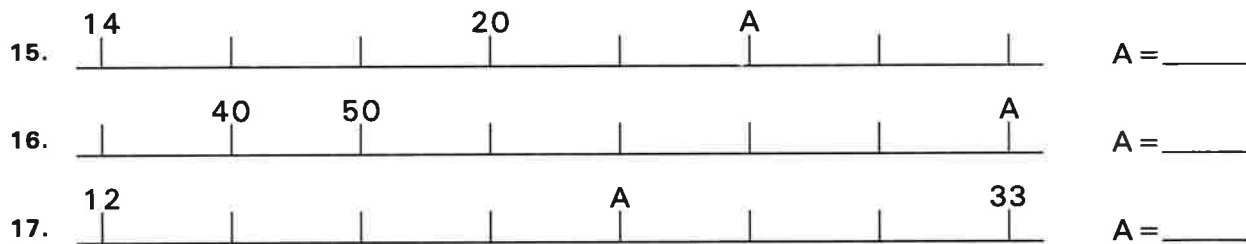
Fill in the missing numbers by figuring out the intervals.

- |                               |                                |
|-------------------------------|--------------------------------|
| 1. 24, _____, _____, 33, 36   | 6. 30, _____, 40, _____, 50    |
| 2. 0, 6, _____, _____, _____  | 7. _____, 7, 14, _____, _____  |
| 3. 7, _____, 21, 28, _____    | 8. 14, 16, _____, _____, _____ |
| 4. _____, 44, 46, 48, _____   | 9. 10, _____, _____, _____, 50 |
| 5. 8, 16, _____, _____, _____ | 10. 5, _____, _____, 20, 25    |



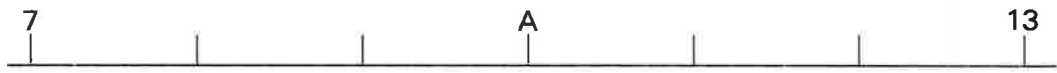


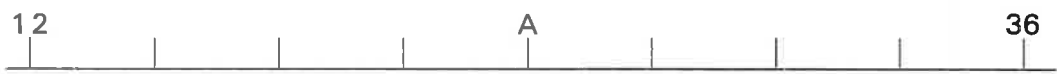




Figure out the intervals, and then fill in the gaps on the following number lines.



First find the interval, and then figure out what *A* should be on each of the following number lines.



Find the interval, and then figure out what  $A$  should be on each of the following number lines.

1.  A = \_\_\_\_\_
2.  A = \_\_\_\_\_
3.  A = \_\_\_\_\_
4.  A = \_\_\_\_\_
5.  A = \_\_\_\_\_
6.  A = \_\_\_\_\_
7.  A = \_\_\_\_\_
8.  A = \_\_\_\_\_
9.  A = \_\_\_\_\_
10.  A = \_\_\_\_\_

Fill in this *times table chart*. Try to make it perfect – no mistakes! Start with  $0 \times 0$ . You may wish to refer back to this grid as you go through this book.

X	0	1	2	3	4	5	6	7	8	9	10	11	12
0													
1													
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													

On the line, write each number in words. The spellings are given below. Use a dash between a number ending in *ty* and another number, for example: *thirty-four, fifty-nine*.

1 one	5 five	9 nine	13 thirteen	17 seventeen	30 thirty	70 seventy
2 two	6 six	10 ten	14 fourteen	18 eighteen	40 forty	80 eighty
3 three	7 seven	11 eleven	15 fifteen	19 nineteen	50 fifty	90 ninety
4 four	8 eight	12 twelve	16 sixteen	20 twenty	60 sixty	100 one hundred

- 1. 27 \_\_\_\_\_
- 2. 49 \_\_\_\_\_
- 3. 81 \_\_\_\_\_
- 4. 98 \_\_\_\_\_
- 5. 53 \_\_\_\_\_
- 6. 211 \_\_\_\_\_
- 7. 318 \_\_\_\_\_
- 8. 104 \_\_\_\_\_
- 9. 622 \_\_\_\_\_
- 10. 914 \_\_\_\_\_
- 11. 299 \_\_\_\_\_
- 12. 325 \_\_\_\_\_
- 13. 788 \_\_\_\_\_
- 14. 313 \_\_\_\_\_
- 15. 470 \_\_\_\_\_
- 16. 901 \_\_\_\_\_

Write the following words as numbers.

- 17. five hundred sixty-two \_\_\_\_\_
- 18. four hundred ninety-eight \_\_\_\_\_
- 19. two hundred fourteen \_\_\_\_\_
- 20. four hundred twelve \_\_\_\_\_
- 21. six hundred two \_\_\_\_\_
- 22. seven hundred eighty-six \_\_\_\_\_

Write the following numbers as words. Spellings are given below.

2 two  
4 four  
8 eight  
11 eleven

12 twelve  
13 thirteen  
14 fourteen

18 eighteen  
40 forty  
50 fifty

80 eighty  
90 ninety  
100 one hundred

1. 355 \_\_\_\_\_
2. 299 \_\_\_\_\_
3. 146 \_\_\_\_\_
4. 864 \_\_\_\_\_
5. 349 \_\_\_\_\_
6. 999 \_\_\_\_\_
7. 540 \_\_\_\_\_
8. 504 \_\_\_\_\_
9. 450 \_\_\_\_\_
10. 111 \_\_\_\_\_
11. 302 \_\_\_\_\_
12. 805 \_\_\_\_\_

Write the following words as numbers.

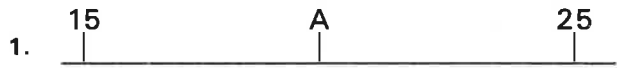
13. seven hundred twenty-five \_\_\_\_\_
14. nine hundred thirty-six \_\_\_\_\_
15. four hundred one \_\_\_\_\_
16. three hundred sixty-six \_\_\_\_\_
17. five hundred seventy-two \_\_\_\_\_
18. nine hundred nine \_\_\_\_\_
19. nine hundred nineteen \_\_\_\_\_
20. four hundred twelve \_\_\_\_\_

Now work out this problem, and write the answer in words.

21. A woman will make twenty-nine dollars today and thirty-two dollars tomorrow. How much will she make in all?

\_\_\_\_\_

Find the interval, and then figure out what *A* should be on each of the following number lines.



A = \_\_\_\_\_



A = \_\_\_\_\_



A = \_\_\_\_\_



A = \_\_\_\_\_



A = \_\_\_\_\_

6.  $(8 \times 4) + (7 \times 7) + (9 \times 7) = \underline{\hspace{2cm}}$

7.  $(6 \times 9) + (8 \times 6) + (7 \times 6) = \underline{\hspace{2cm}}$

8.  $(4 \times 5) + (12 \times 4) + (3 \times 9) = \underline{\hspace{2cm}}$

9.  $(19 \times 2) + \underline{\hspace{2cm}} = 100$

10.  $(13 \times 4) + \underline{\hspace{2cm}} = 100$

11.  $(15 \times 5) + \underline{\hspace{2cm}} = 100$

12. 
$$\begin{array}{r} 742 \\ \times 7 \\ \hline \end{array}$$

13. 
$$\begin{array}{r} 925 \\ \times 6 \\ \hline \end{array}$$

14. 
$$\begin{array}{r} 218 \\ \times 4 \\ \hline \end{array}$$

15. 
$$\begin{array}{r} 7931 \\ - 217 \\ \hline \end{array}$$

16. 
$$\begin{array}{r} 9403 \\ - 812 \\ \hline \end{array}$$

17. 
$$\begin{array}{r} 2847 \\ - 218 \\ \hline \end{array}$$

18. 
$$\begin{array}{r} 3794 \\ 4489 \\ + 2208 \\ \hline \end{array}$$

19. 
$$\begin{array}{r} 7743 \\ 2891 \\ 7726 \\ + 4091 \\ \hline \end{array}$$



Write the following numbers as words.

- 1. 895 \_\_\_\_\_
- 2. 123 \_\_\_\_\_
- 3. 579 \_\_\_\_\_
- 4. 996 \_\_\_\_\_
- 5. 885 \_\_\_\_\_
- 6. 213 \_\_\_\_\_
- 7. 317 \_\_\_\_\_
- 8. 818 \_\_\_\_\_
- 9. 793 \_\_\_\_\_
- 10. 203 \_\_\_\_\_
- 11. 709 \_\_\_\_\_

Now write the following words as numbers.

- 12. seven hundred fifty-nine \_\_\_\_\_
- 13. two hundred thirteen \_\_\_\_\_
- 14. five hundred eighteen \_\_\_\_\_
- 15. five hundred eighty \_\_\_\_\_
- 16. five hundred eight \_\_\_\_\_
- 17. nine hundred one \_\_\_\_\_
- 18. one hundred nineteen \_\_\_\_\_
- 19. six hundred forty-two \_\_\_\_\_
- 20. six hundred six \_\_\_\_\_
- 21. eight hundred fifty-nine \_\_\_\_\_
- 22. four hundred eighty-eight \_\_\_\_\_
- 23. two hundred \_\_\_\_\_
- 24. six hundred thirteen \_\_\_\_\_
- 25. two hundred twelve \_\_\_\_\_
- 26. three hundred nineteen \_\_\_\_\_
- 27. two hundred ninety \_\_\_\_\_

Work out the following problem, and write the answer in words.

- 28. A boy paid one hundred thirty-five dollars for a minibike and one hundred thirteen dollars for a bicycle. How much did he spend in all?

\_\_\_\_\_

Write the following numbers as words.

- 1. 398 \_\_\_\_\_
- 2. 202 \_\_\_\_\_
- 3. 403 \_\_\_\_\_
- 4. 514 \_\_\_\_\_
- 5. 980 \_\_\_\_\_
- 6. 616 \_\_\_\_\_
- 7. 392 \_\_\_\_\_
- 8. 912 \_\_\_\_\_
- 9. 206 \_\_\_\_\_
- 10. 365 \_\_\_\_\_
- 11. 414 \_\_\_\_\_
- 12. 441 \_\_\_\_\_

Write the following words as numbers.

- 13. three hundred thirteen \_\_\_\_\_
- 14. three hundred thirty-one \_\_\_\_\_
- 15. three hundred thirty \_\_\_\_\_
- 16. five hundred one \_\_\_\_\_
- 17. two hundred eighty-six \_\_\_\_\_
- 18. six hundred sixteen \_\_\_\_\_
- 19. seven hundred sixty-one \_\_\_\_\_
- 20. two hundred sixty-nine \_\_\_\_\_
- 21. nine hundred twenty-six \_\_\_\_\_
- 22. six hundred twenty-nine \_\_\_\_\_
- 23. six hundred ninety-two \_\_\_\_\_
- 24. two hundred seventeen \_\_\_\_\_
- 25. eight hundred eighteen \_\_\_\_\_
- 26. five hundred five \_\_\_\_\_

Now work out the following two problems, and write the answers in words.

- 27. A girl worked part time and made thirty-seven dollars one week, twenty-nine dollars the next, and forty-eight dollars the week after that. How much did she make in all?  
\_\_\_\_\_
- 28. There were three hundred eighty-six girls in a school and four hundred twelve boys. How many students were in the school?  
\_\_\_\_\_

**Write the following numbers as words.**

1. 246 \_\_\_\_\_
2. 415 \_\_\_\_\_
3. 290 \_\_\_\_\_
4. 386 \_\_\_\_\_
5. 891 \_\_\_\_\_
6. 355 \_\_\_\_\_
7. 801 \_\_\_\_\_
8. 212 \_\_\_\_\_
9. 513 \_\_\_\_\_
10. 890 \_\_\_\_\_
11. 706 \_\_\_\_\_
12. 614 \_\_\_\_\_

**Write the following words as numbers.**

13. three hundred seventy-nine \_\_\_\_\_
14. two hundred eighty \_\_\_\_\_
15. nine hundred nineteen \_\_\_\_\_
16. seven hundred twenty-four \_\_\_\_\_
17. three hundred seventeen \_\_\_\_\_
18. six hundred forty-one \_\_\_\_\_
19. two hundred fourteen \_\_\_\_\_

**Now solve the following problem, and write the answer in words.**

20. A man makes one hundred seventy-three dollars a week. How much can he make in four weeks?

\_\_\_\_\_

Carefully solve the following problems.

$$\begin{array}{r} 1. \quad 781 \\ \quad 489 \\ + \quad 743 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 6493 \\ \quad 2891 \\ + \quad 4083 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 9874 \\ \quad 2281 \\ \quad 4836 \\ + \quad 2890 \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 7736 \\ - \quad 2291 \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad 6942 \\ - \quad 1469 \\ \hline \end{array}$$

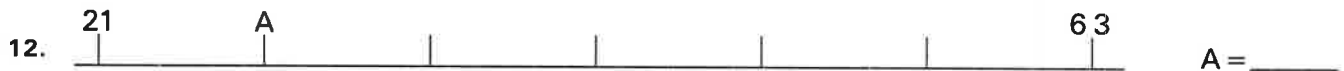
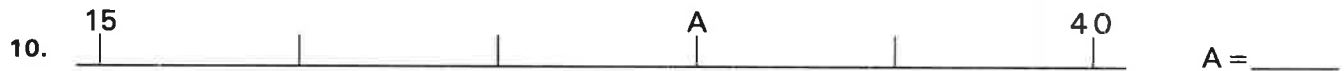
$$\begin{array}{r} 6. \quad 12741 \\ - \quad 9623 \\ \hline \end{array}$$

$$\begin{array}{r} 7. \quad 649 \\ \times \quad 3 \\ \hline \end{array}$$

$$\begin{array}{r} 8. \quad 4361 \\ \times \quad 5 \\ \hline \end{array}$$

$$\begin{array}{r} 9. \quad 2986 \\ \times \quad 8 \\ \hline \end{array}$$

Find the interval, and then figure out what *A* should be on each of the following number lines.



The *factors* of a number are the numbers that divide evenly into it.  
 The factors of 6 are 2 and 3 because  $2 \times 3 = 6$ .

Write the factors of each of the following numbers. (Don't count the number itself or 1.)

1. The factors of 4 are \_\_\_\_\_  $\times$  \_\_\_\_\_.
2. The factors of 6 are \_\_\_\_\_  $\times$  \_\_\_\_\_.
3. The factors of 8 are \_\_\_\_\_  $\times$  \_\_\_\_\_.
4. The factors of 9 are \_\_\_\_\_  $\times$  \_\_\_\_\_.
5. The factors of 10 are \_\_\_\_\_  $\times$  \_\_\_\_\_.
6. The factors of 14 are \_\_\_\_\_  $\times$  \_\_\_\_\_.
7. The factors of 15 are \_\_\_\_\_  $\times$  \_\_\_\_\_.
8. The factors of 21 are \_\_\_\_\_  $\times$  \_\_\_\_\_.
9. The factors of 22 are \_\_\_\_\_  $\times$  \_\_\_\_\_.
10. The factors of 25 are \_\_\_\_\_  $\times$  \_\_\_\_\_.
11. The factors of 26 are \_\_\_\_\_  $\times$  \_\_\_\_\_.
12. The factors of 27 are \_\_\_\_\_  $\times$  \_\_\_\_\_.
13. The factors of 33 are \_\_\_\_\_  $\times$  \_\_\_\_\_.

The following numbers have more than one set of factors. See if you can think of all of them.  
 (Don't count the number itself or 1.)

14. The factors of 12 are \_\_\_\_\_  $\times$  \_\_\_\_\_      also \_\_\_\_\_  $\times$  \_\_\_\_\_.
15. The factors of 16 are \_\_\_\_\_  $\times$  \_\_\_\_\_      also \_\_\_\_\_  $\times$  \_\_\_\_\_.
16. The factors of 18 are \_\_\_\_\_  $\times$  \_\_\_\_\_      also \_\_\_\_\_  $\times$  \_\_\_\_\_.
17. The factors of 20 are \_\_\_\_\_  $\times$  \_\_\_\_\_      also \_\_\_\_\_  $\times$  \_\_\_\_\_.
18. The factors of 24 are \_\_\_\_\_  $\times$  \_\_\_\_\_      also \_\_\_\_\_  $\times$  \_\_\_\_\_      also \_\_\_\_\_  $\times$  \_\_\_\_\_.
19. The factors of 28 are \_\_\_\_\_  $\times$  \_\_\_\_\_      also \_\_\_\_\_  $\times$  \_\_\_\_\_.
20. The factors of 30 are \_\_\_\_\_  $\times$  \_\_\_\_\_      also \_\_\_\_\_  $\times$  \_\_\_\_\_      also \_\_\_\_\_  $\times$  \_\_\_\_\_.

A number that has only two factors, 1 and the number itself, is called a *prime number*. The number 1 is an exception; it is not considered prime.

Write the factors of the following numbers. The numbers with an asterisk ( \* ) by them have more than one set of factors. If a number doesn't have any factors other than one and itself, write *prime* on the line.

- |         |              |         |       |
|---------|--------------|---------|-------|
| 1. 4    | <u>2 × 2</u> | 18. 21  | _____ |
| 2. 5    | <u>prime</u> | 19. 22  | _____ |
| 3. 6    | _____        | 20. 23  | _____ |
| 4. 7    | _____        | 21. 24* | _____ |
| 5. 8    | _____        | 22. 25  | _____ |
| 6. 9    | _____        | 23. 26  | _____ |
| 7. 10   | _____        | 24. 27  | _____ |
| 8. 11   | _____        | 25. 28* | _____ |
| 9. 12*  | _____        | 26. 29  | _____ |
| 10. 13  | _____        | 27. 30* | _____ |
| 11. 14  | _____        | 28. 31  | _____ |
| 12. 15  | _____        | 29. 32* | _____ |
| 13. 16* | _____        | 30. 33  | _____ |
| 14. 17  | _____        | 31. 34  | _____ |
| 15. 18* | _____        | 32. 35  | _____ |
| 16. 19  | _____        | 33. 36* | _____ |
| 17. 20* | _____        |         |       |

Find the interval, and then figure out what *A* should be on each of the following number lines.



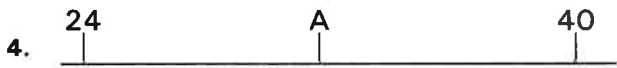
A = \_\_\_\_\_



A = \_\_\_\_\_



A = \_\_\_\_\_



A = \_\_\_\_\_



A = \_\_\_\_\_

Write the following words as numbers.

6. five hundred twenty-three \_\_\_\_\_
7. two hundred two \_\_\_\_\_
8. eight hundred seventy \_\_\_\_\_
9. three hundred eleven \_\_\_\_\_
10. four hundred four \_\_\_\_\_
11. six hundred eight \_\_\_\_\_

Write the following numbers as words.

12. 693 \_\_\_\_\_
13. 314 \_\_\_\_\_
14. 297 \_\_\_\_\_

15. 880 \_\_\_\_\_  
\_\_\_\_\_

16. 112 \_\_\_\_\_  
\_\_\_\_\_

17. 754 \_\_\_\_\_  
\_\_\_\_\_

18.  $(4 \times 8) + (7 \times 3) + (9 \times 2) =$  \_\_\_\_\_

19.  $(9 \times 8) + (6 \times 7) + (11 \times 3) =$  \_\_\_\_\_

20.  $(4 \times 7) + (8 \times 7) + (4 \times 8) =$  \_\_\_\_\_

21.  $(4 \times 8) +$  \_\_\_\_\_  $= 100$

22.  $(6 \times 7) +$  \_\_\_\_\_  $= 100$

23.  $(3 \times 12) +$  \_\_\_\_\_  $= 100$

24. The best tickets to a rock concert cost \$15. How much would 9 of these tickets cost?  
\_\_\_\_\_

25. A woman had several savings accounts in different banks. She had \$4,890 in one bank, \$7,000 in another, \$9,048 in a third, and \$4,299 in a fourth. How much money did she have in all 4 banks?  
\_\_\_\_\_

26. A family began to drive across the United States, a drive of 2,893 miles. On the first day they covered 567 miles. How far did they have left to travel?  
\_\_\_\_\_

27. 
$$\begin{array}{r} 4793 \\ - 218 \\ \hline \end{array}$$

28. 
$$\begin{array}{r} 9301 \\ - 140 \\ \hline \end{array}$$

29. 
$$\begin{array}{r} 7789 \\ 2874 \\ + 3899 \\ \hline \end{array}$$

Write the factors of the following numbers. An asterisk ( \* ) means that a number has more than one set of factors. Write *prime* by any number that doesn't have factors other than 1 and itself.

- |               |               |
|---------------|---------------|
| 1. 2 _____    | 15. 26 _____  |
| 2. 4 _____    | 16. 28* _____ |
| 3. 6 _____    | 17. 30* _____ |
| 4. 8 _____    | 18. 32* _____ |
| 5. 10 _____   | 19. 34 _____  |
| 6. 12* _____  | 20. 36* _____ |
| 7. 14 _____   | 21. 37 _____  |
| 8. 16* _____  | 22. 38 _____  |
| 9. 18* _____  | 23. 40* _____ |
| 10. 20* _____ | 24. 42* _____ |
| 11. 21 _____  | 25. 43 _____  |
| 12. 23 _____  | 26. 44* _____ |
| 13. 24* _____ | 27. 45* _____ |
| 14. 25 _____  |               |



Write the factors of the following numbers. An asterisk (\*) means that a number has more than one set of factors. Write *prime* by any number that doesn't have factors other than 1 and itself.

1. 3 \_\_\_\_\_
2. 5 \_\_\_\_\_
3. 7 \_\_\_\_\_
4. 8 \_\_\_\_\_
5. 9 \_\_\_\_\_
6. 10 \_\_\_\_\_
7. 2 \_\_\_\_\_
8. 4 \_\_\_\_\_
9. 6 \_\_\_\_\_
10. 11 \_\_\_\_\_
11. 13 \_\_\_\_\_
12. 21 \_\_\_\_\_
13. 23 \_\_\_\_\_
14. 24\* \_\_\_\_\_
15. 25 \_\_\_\_\_
16. 27 \_\_\_\_\_
17. 29 \_\_\_\_\_

18. 30\* \_\_\_\_\_
19. 31 \_\_\_\_\_
20. 33 \_\_\_\_\_
21. 35 \_\_\_\_\_
22. 36\* \_\_\_\_\_
23. 41 \_\_\_\_\_
24. 42\* \_\_\_\_\_
25. 43 \_\_\_\_\_
26. 45\* \_\_\_\_\_
27. 47 \_\_\_\_\_
28. 49 \_\_\_\_\_
29. 50\* \_\_\_\_\_

On the following lines, fill in the missing prime numbers.

30. 2, 3, \_\_\_\_\_, \_\_\_\_\_, 11, 13, \_\_\_\_\_,  
 \_\_\_\_\_, \_\_\_\_\_, 29, \_\_\_\_\_, \_\_\_\_\_, 41,  
 \_\_\_\_\_, 47, \_\_\_\_\_

Write the factors of the following numbers. An asterisk ( \* ) means that a number has more than one set of factors.

Examples:

$$8 = 2 \times 4$$

$$40 = 2 \times 20, 4 \times 10, 5 \times 8$$

Write *prime* by any number that doesn't have factors other than 1 and itself.

- |               |               |
|---------------|---------------|
| 1. 6 _____    | 13. 21 _____  |
| 2. 7 _____    | 14. 22 _____  |
| 3. 9 _____    | 15. 24* _____ |
| 4. 10 _____   | 16. 25 _____  |
| 5. 11 _____   | 17. 26 _____  |
| 6. 12* _____  | 18. 27 _____  |
| 7. 14 _____   | 19. 28* _____ |
| 8. 15 _____   | 20. 29 _____  |
| 9. 16* _____  | 21. 30* _____ |
| 10. 17 _____  | 22. 31 _____  |
| 11. 18* _____ | 23. 32* _____ |
| 12. 20* _____ |               |

Work out the following problems.

$$\begin{array}{r} 1. \quad 6492 \\ \quad 4307 \\ + \quad 9984 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 4287 \\ \quad 7403 \\ \quad 9456 \\ + \quad 2945 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 6389 \\ - \quad 2197 \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 4036 \\ - \quad 1427 \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad 9427 \\ \times \quad 7 \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 6403 \\ \times \quad 5 \\ \hline \end{array}$$

Find the interval, and then figure out what *A* should be on each of the following number lines.



Write the following numbers as words.

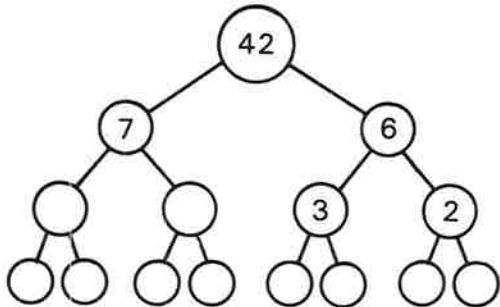
10. 749 \_\_\_\_\_
11. 218 \_\_\_\_\_
12. 604 \_\_\_\_\_

Write the following words as numbers.

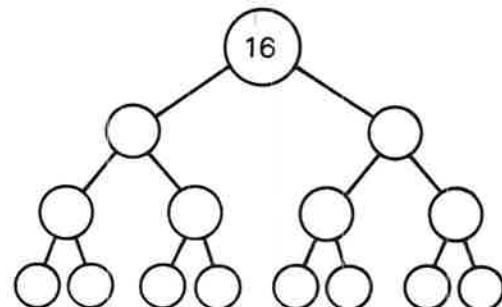
13. six hundred eighteen \_\_\_\_\_
14. nine hundred two \_\_\_\_\_
15. five hundred seventy-four \_\_\_\_\_

Break down each number to its factors. (Don't use the number itself or 1.) Keep breaking numbers down to their factors until you get only prime numbers. Write the prime factors on the line below each problem.

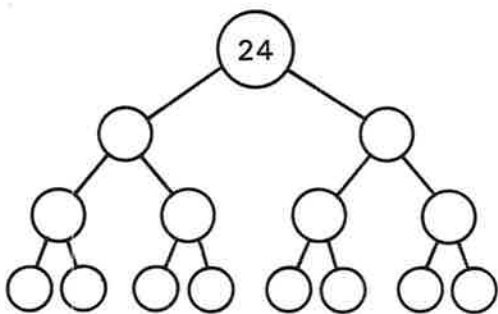
Example:



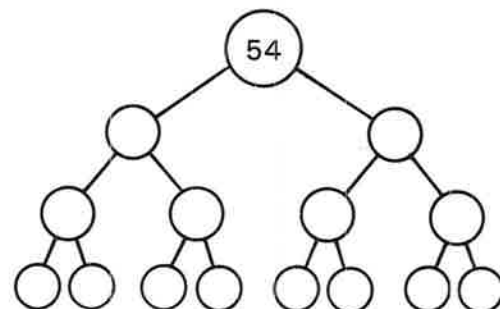
Prime factors of 42 = 7 × 3 × 2



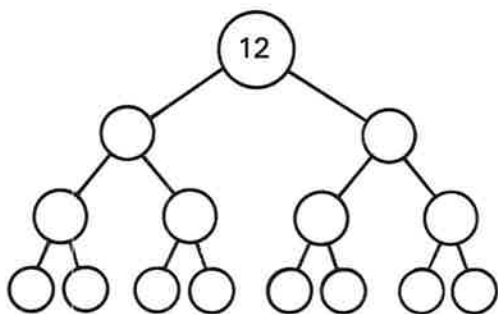
1. Prime factors of 16 = \_\_\_\_\_



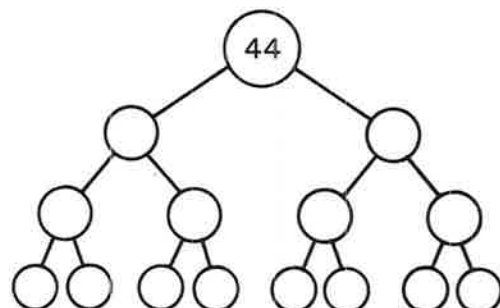
2. Prime factors = \_\_\_\_\_



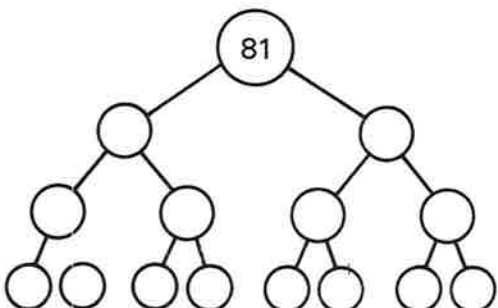
3. Prime factors = \_\_\_\_\_



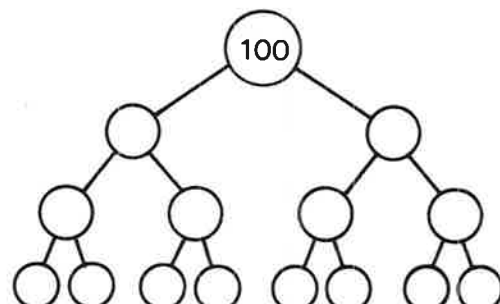
4. Prime factors = \_\_\_\_\_



5. Prime factors = \_\_\_\_\_

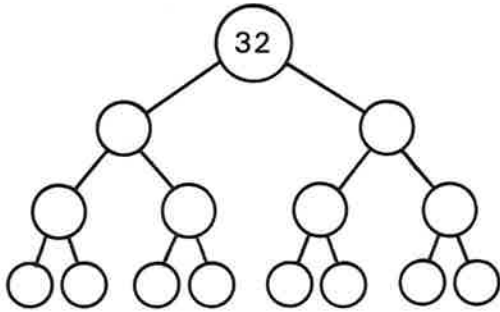


6. Prime factors = \_\_\_\_\_

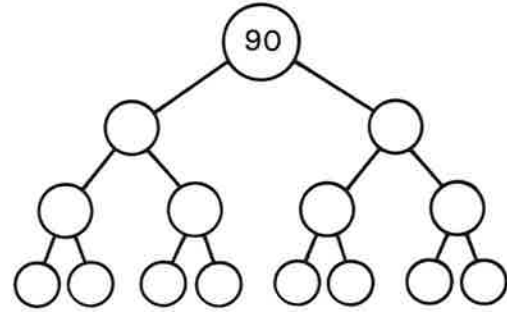


7. Prime factors = \_\_\_\_\_

Break down each number to its factors. Don't use the number itself or 1. Keep going until you get only prime factors. Then write the prime factors on the line below each problem.

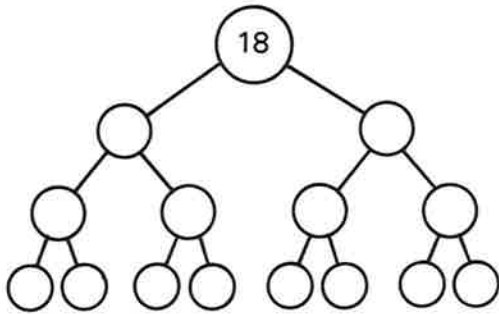


1. Prime factors = \_\_\_\_\_

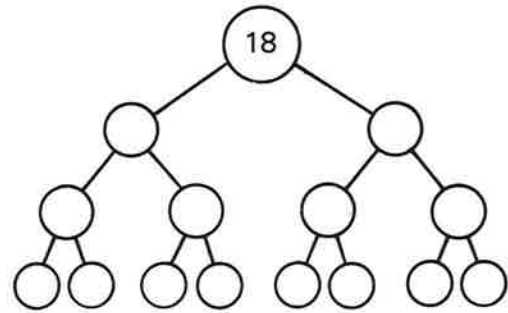


2. Prime factors = \_\_\_\_\_

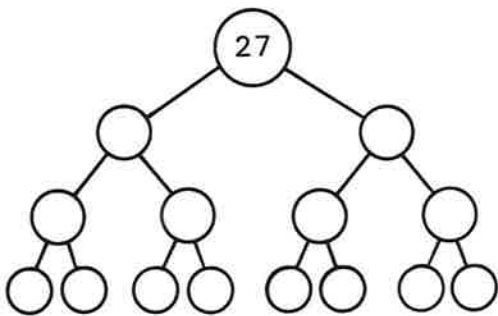
Do the factors of 18 two ways. Will the factors be the same? \_\_\_\_\_



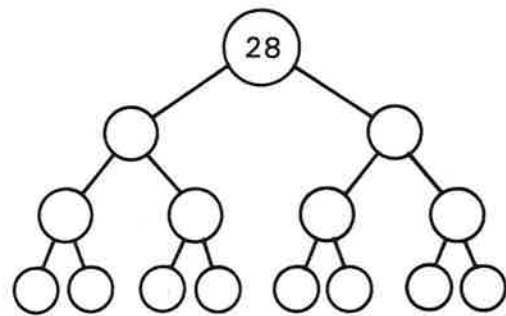
3. Prime factors = \_\_\_\_\_



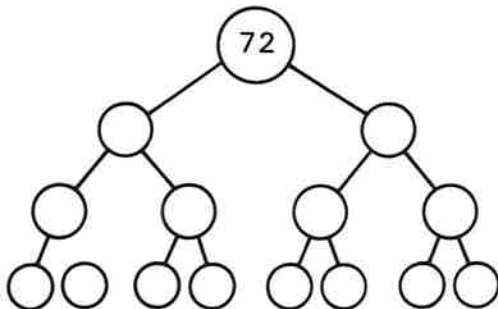
4. Prime factors = \_\_\_\_\_



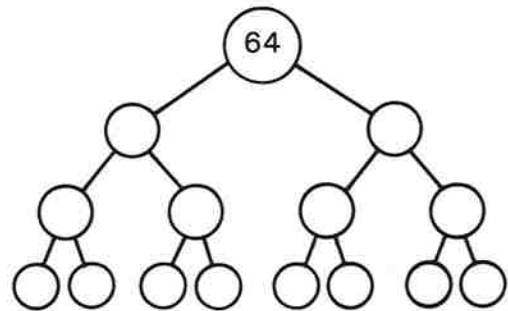
5. Prime factors = \_\_\_\_\_



6. Prime factors = \_\_\_\_\_

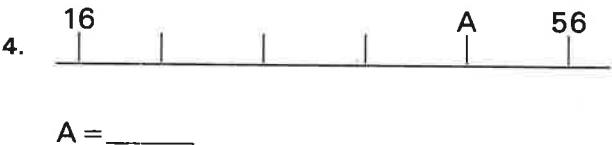
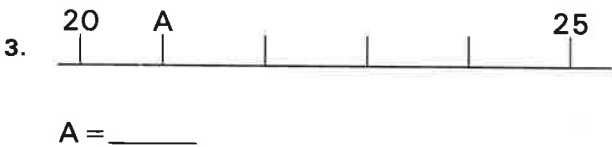
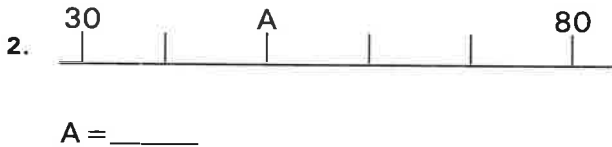


7. Prime factors = \_\_\_\_\_



8. Prime factors = \_\_\_\_\_

Find the interval, and then figure out what *A* should be on each of the following number lines.



Write the following numbers as words.

5. 348 \_\_\_\_\_  
\_\_\_\_\_
6. 112 \_\_\_\_\_  
\_\_\_\_\_
7. 217 \_\_\_\_\_  
\_\_\_\_\_
8. 502 \_\_\_\_\_  
\_\_\_\_\_
9. 888 \_\_\_\_\_  
\_\_\_\_\_
10. 945 \_\_\_\_\_  
\_\_\_\_\_

Write the following words as numbers.

11. three hundred forty-eight \_\_\_\_\_
12. five hundred ninety \_\_\_\_\_
13. four hundred nine \_\_\_\_\_
14. eight hundred fifty-seven \_\_\_\_\_
15. six hundred sixty-one \_\_\_\_\_
16. seven hundred \_\_\_\_\_

Write the factors of each of the following numbers. Some numbers may have more than one set of factors. Write *prime* by any number that doesn't have factors other than 1 and itself.

17. 28 \_\_\_\_\_      20. 21 \_\_\_\_\_  
\_\_\_\_\_
18. 33 \_\_\_\_\_      21. 11 \_\_\_\_\_
19. 9 \_\_\_\_\_

23. A man makes \$35 a day. How much can he make working 6 days?

\_\_\_\_\_

24. A champion bricklayer can lay 684 bricks in 1 hour. How many bricks can he lay in 8 hours of work?

\_\_\_\_\_

25. Shawna got \$50 for her birthday from her rich grandmother. She spent \$37 on a bracelet and \$9 on an afternoon snack at McDonald's. How much of the money did she have left?

\_\_\_\_\_

26.  $(9 \times 9) + (8 \times 8) + (7 \times 7) =$  \_\_\_\_\_

27.  $(11 \times 8) +$  \_\_\_\_\_  $= 100$

28. 
$$\begin{array}{r} 6831 \\ - 414 \\ \hline \end{array}$$

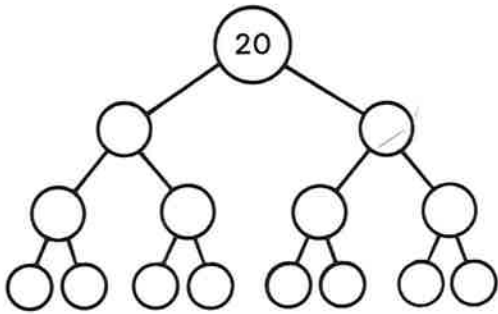
30. 
$$\begin{array}{r} 7894 \\ 2731 \\ 2899 \\ \hline \end{array}$$

29. 
$$\begin{array}{r} 1201 \\ - 420 \\ \hline \end{array}$$

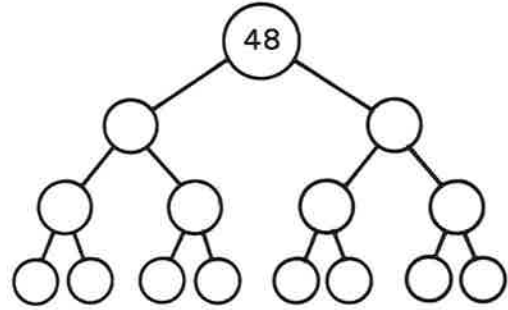
$$+ 403$$

# Prime Factors 3

Break down each number to its prime factors. Then write these factors on the line below each problem.

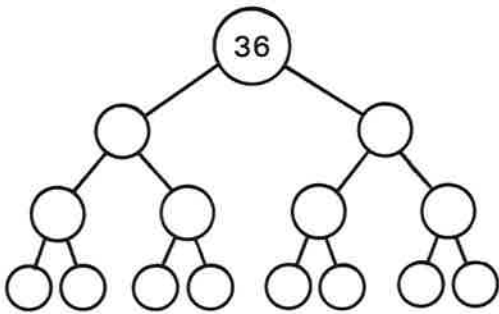


1. Prime factors = \_\_\_\_\_

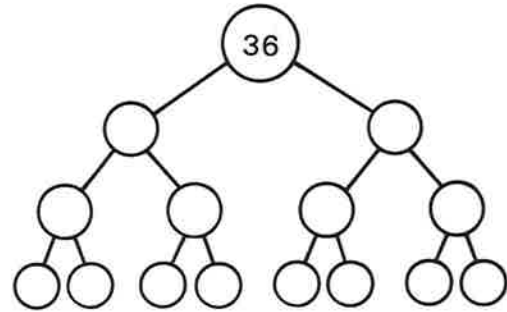


2. Prime factors = \_\_\_\_\_

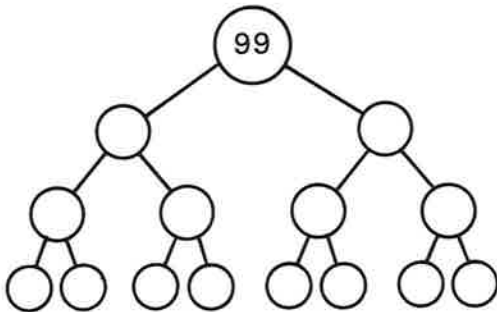
Do the factors of 36 two ways.



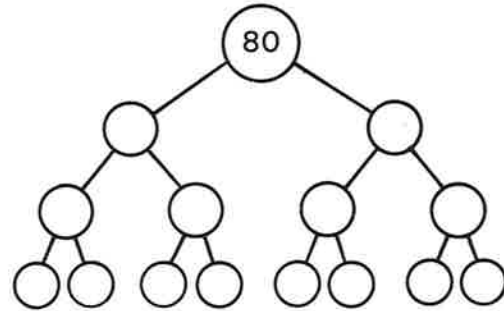
3. Prime factors = \_\_\_\_\_



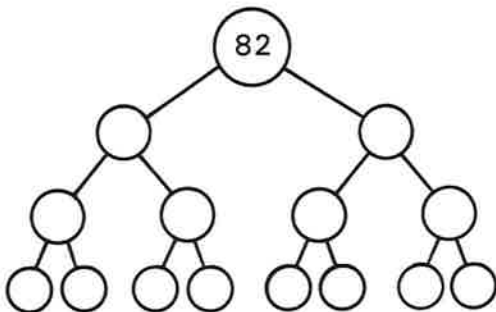
4. Prime factors = \_\_\_\_\_



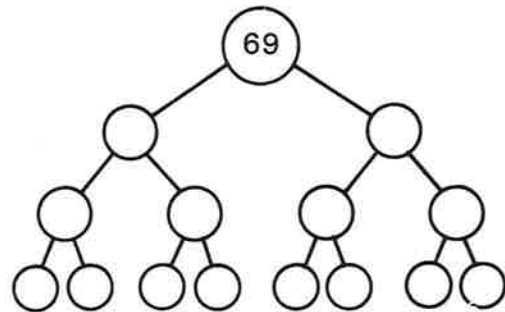
5. Prime factors = \_\_\_\_\_



6. Prime factors = \_\_\_\_\_

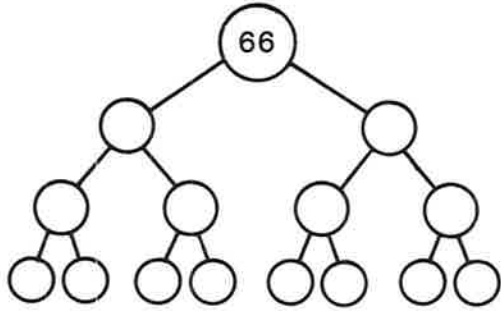


7. Prime factors = \_\_\_\_\_

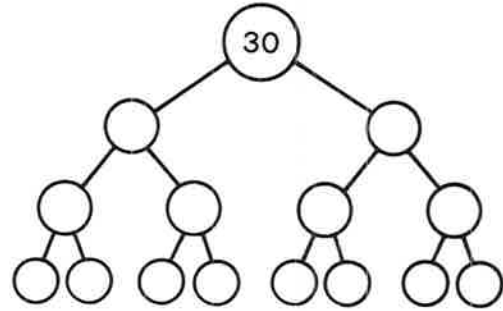


8. Prime factors = \_\_\_\_\_

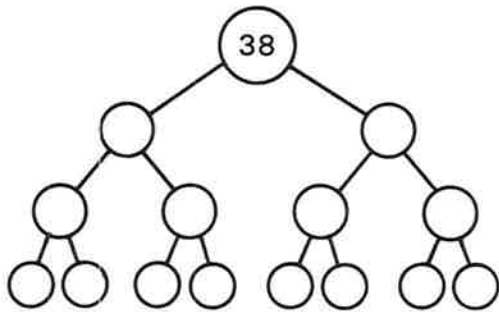
Break down each number to its prime factors. Write these factors on the line below each problem.



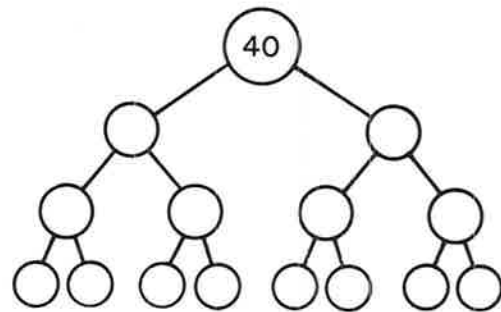
1. Prime factors = \_\_\_\_\_



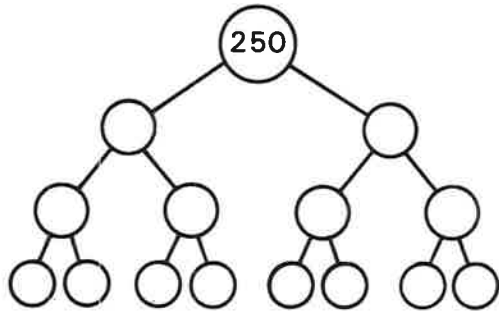
2. Prime factors = \_\_\_\_\_



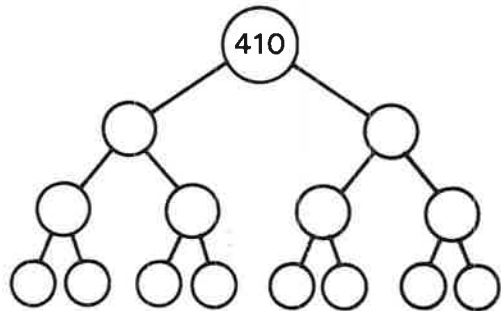
3. Prime factors = \_\_\_\_\_



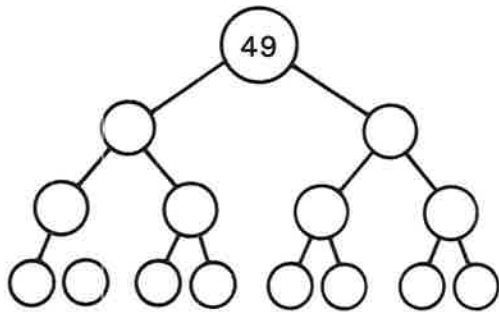
4. Prime factors = \_\_\_\_\_



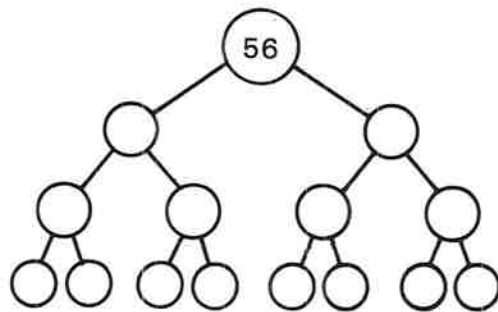
5. Prime factors = \_\_\_\_\_



6. Prime factors = \_\_\_\_\_



7. Prime factors = \_\_\_\_\_

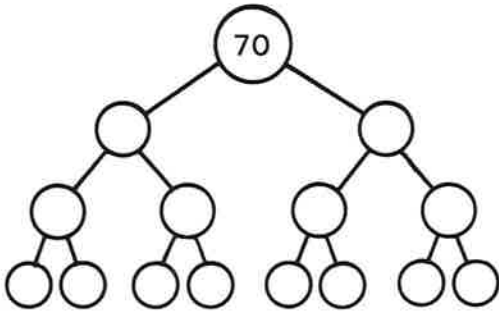


8. Prime factors = \_\_\_\_\_

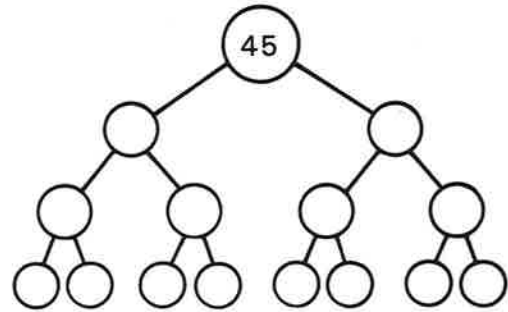


# Test 4—Prime Factors

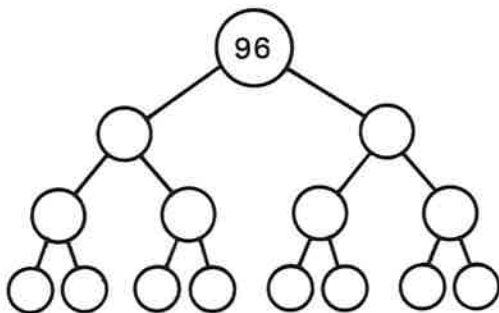
Break down each number to its prime factors. Write these factors on the line below each problem.



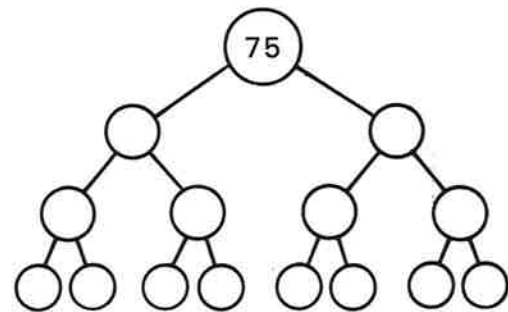
1. Prime factors = \_\_\_\_\_



2. Prime factors = \_\_\_\_\_



3. Prime factors = \_\_\_\_\_

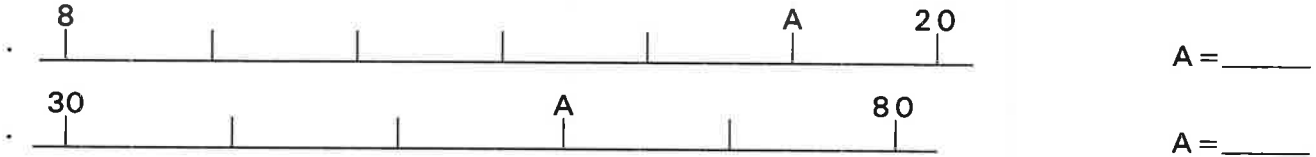


4. Prime factors = \_\_\_\_\_

This is the first of thirty-two tests which you will take at the end of each week. The tests will go over the skills you have learned in previous weeks. The idea is to test you on new skills as you learn them and also to give you practice on the old ones. This way, by the end of the year, you should be good at all the skills you've learned and practiced in this book.

Each skill will always be the same question number; for instance, question two will always be on writing numbers as words. As the tests get longer during the year, you will find the questions at the beginning easier and easier because you will have had so much practice on them. If you do get a question wrong, be sure to check it over and understand your mistake. That way you will get it right on the next test you take.

1. Find the interval, and then figure out what  $A$  is on each of the following number lines.



2. Write 308 using words. \_\_\_\_\_  
 Write six hundred forty-nine using numbers. \_\_\_\_\_
3. Factor 20 two ways. \_\_\_\_\_  
 Factor 18 two ways. \_\_\_\_\_

When you divide, follow the four steps below.

1) Divide

$$\begin{array}{r} 3 \\ 5 \overline{) 185} \end{array}$$

2) Multiply

$$\begin{array}{r} 3 \\ 5 \overline{) 185} \\ \underline{15} \end{array}$$

3) Subtract

$$\begin{array}{r} 3 \\ 5 \overline{) 185} \\ \underline{-15} \\ 3 \end{array}$$

4) Bring down

$$\begin{array}{r} 3 \\ 5 \overline{) 185} \\ \underline{-15\downarrow} \\ 35 \end{array}$$

Continue to follow these four steps until all the numbers are used up.

1) Divide

$$\begin{array}{r} 37 \\ 5 \overline{) 185} \\ \underline{15} \\ 35 \end{array}$$

2) Multiply

$$\begin{array}{r} 37 \\ 5 \overline{) 185} \\ \underline{15} \\ 35 \\ \underline{35} \end{array}$$

3) Subtract

$$\begin{array}{r} 37 \\ 5 \overline{) 185} \\ \underline{15} \\ 35 \\ \underline{-35} \\ 0 \end{array}$$

Follow the four steps used in division to solve the following problems.

1.  $7 \overline{) 413}$

2.  $4 \overline{) 252}$

3.  $9 \overline{) 4716}$

4.  $6 \overline{) 444}$

5.  $5 \overline{) 3410}$

6.  $3 \overline{) 171}$

7.  $4 \overline{) 3352}$

Solve the following division problems. Divide carefully.

Remember the four steps:

- 1) Divide
- 2) Multiply
- 3) Subtract
- 4) Bring down

Example:

$$\begin{array}{r}
 793 \\
 3 \overline{) 2379} \\
 \underline{-21} \phantom{0} \\
 27 \phantom{0} \\
 \underline{-27} \phantom{0} \\
 09 \phantom{0} \\
 \underline{-9} \phantom{0} \\
 0
 \end{array}$$

1.  $5 \overline{) 9860}$

2.  $7 \overline{) 3689}$

3.  $6 \overline{) 1686}$

4.  $4 \overline{) 10288}$

5.  $9 \overline{) 47466}$

6.  $4 \overline{) 3304}$

7.  $5 \overline{) 9380}$

Solve the following problems by applying the four steps used in division. Put your answer on the line below each problem.

8. A man drives 3,204 miles in 6 days. On the average, how far did he drive each day?

\_\_\_\_\_

9. A woman won \$1,575 at the race track. She decided to divide the money evenly among herself and her 6 children. (That's 7 people.) How much did each person get?

\_\_\_\_\_

10. A man paid \$3,249 for a new car. He paid for the car in 9 equal payments. How much was each payment?

\_\_\_\_\_

Find the interval, and then figure out what *A* should be on each of the following number lines.



A = \_\_\_\_\_



A = \_\_\_\_\_



A = \_\_\_\_\_



A = \_\_\_\_\_

Write the following words as numbers.

5. five hundred eighty-five \_\_\_\_\_
6. nine hundred twelve \_\_\_\_\_
7. four hundred fifty \_\_\_\_\_
8. six hundred one \_\_\_\_\_
9. one hundred two \_\_\_\_\_

Write the following numbers as words.

10. 402 \_\_\_\_\_  
\_\_\_\_\_
11. 297 \_\_\_\_\_  
\_\_\_\_\_
12. 444 \_\_\_\_\_  
\_\_\_\_\_
13. 314 \_\_\_\_\_  
\_\_\_\_\_

14.  $910$  \_\_\_\_\_  
\_\_\_\_\_

Write the factors of the numbers below. Some numbers may have more than one set of factors. Write *prime* if a number has no factors other than 1 and itself.

15. 6 \_\_\_\_\_ 18. 18 \_\_\_\_\_

16. 22 \_\_\_\_\_ 19. 19 \_\_\_\_\_

17. 34 \_\_\_\_\_ 20. 45 \_\_\_\_\_

21. George drove at 56 miles an hour. How far did he go in 4 hours?  
\_\_\_\_\_

22.  $(9 \times 6) + (12 \times 4) + (8 \times 3) =$  \_\_\_\_\_

23.  $(21 \times 4) +$  \_\_\_\_\_  $= 100$

24. 
$$\begin{array}{r} 5783 \\ - 269 \\ \hline \end{array}$$

25. 
$$\begin{array}{r} 1630 \\ - 247 \\ \hline \end{array}$$

26. 
$$\begin{array}{r} 8951 \\ \times 4 \\ \hline \end{array}$$

27. 
$$\begin{array}{r} 1773 \\ - 591 \\ \hline \end{array}$$

28. 
$$\begin{array}{r} 3000 \\ - 264 \\ \hline \end{array}$$

29. 
$$\begin{array}{r} 847 \\ 291 \\ 609 \\ + 214 \\ \hline \end{array}$$

30. 
$$\begin{array}{r} 7900 \\ - 216 \\ \hline \end{array}$$

Apply the four steps used in division to solve the following problems. These problems will have remainders. Write these remainders as fractions (remainder on top, divisor on bottom).

Example:

$$\begin{array}{r} 369 \frac{6}{7} \\ 7 \overline{) 2589} \\ \underline{21} \phantom{00} \\ 48 \phantom{00} \\ \underline{42} \phantom{00} \\ 69 \phantom{00} \\ \underline{63} \phantom{00} \\ 6 \end{array}$$

1.  $4 \overline{) 3507}$

2.  $3 \overline{) 4831}$

3.  $8 \overline{) 6621}$

Follow the four steps used in division in the next four problems. These problems have a zero (0) in the middle of the answer. Be sure to put it in!

Example:

$$\begin{array}{r} 804 \\ 6 \overline{) 4824} \\ \underline{48} \phantom{00} \\ 02 \phantom{00} \\ \underline{00} \phantom{00} \\ 24 \phantom{00} \\ \underline{24} \phantom{00} \\ 0 \end{array}$$

4.  $9 \overline{) 954}$

5.  $7 \overline{) 6314}$

6.  $3 \overline{) 25512}$

Solve the following problems. Put your answer on the line below each problem.

7. A teacher makes \$5,196 in 6 months. How much does he make each month?

\_\_\_\_\_

8. Three brothers inherit \$15,201. They decide to split up the money evenly among themselves. How much does each brother get?

\_\_\_\_\_

9. A high-speed train travels 1,134 miles in 9 hours. How far does it travel each hour?

\_\_\_\_\_

Apply the four steps used in division to solve the following problems. Beware of zeroes in the answers!

1.  $8 \overline{)9448}$

2.  $6 \overline{)36144}$

3.  $5 \overline{)4460}$

4.  $9 \overline{)32409}$

Follow the four steps used in division in the next four problems. If there is a remainder, write it as a fraction (remainder on top, divisor on bottom).

5.  $8 \overline{)5376}$

6.  $7 \overline{)2499}$

7.  $5 \overline{)8505}$

8.  $4 \overline{)14564}$

Solve the following problems. Put your answer on the line below each problem.

9. A man worked for 9 months and made \$5,103. How much did he make each month?

\_\_\_\_\_

10. A man wins \$20,192 in the lottery. If he divides it up among his 4 children, how much will each child get?

\_\_\_\_\_

11. A man wants to split up \$4,959 among 6 people. It won't go evenly. How much money is left over?

\_\_\_\_\_

Apply the four steps used in division to solve the following problems. Two of the problems have remainders. Be sure to write these remainders correctly.

1.  $4 \overline{)2512}$

2.  $5 \overline{)3594}$

3.  $9 \overline{)7668}$

4.  $7 \overline{)42357}$

5.  $6 \overline{)37824}$

6.  $3 \overline{)2344}$

7.  $8 \overline{)3944}$

8.  $7 \overline{)8911}$

Solve the next two problems. Put your answer on the line below each problem.

9. A jet made a trip of 4,564 miles in 7 hours. How far did it travel each hour?

\_\_\_\_\_

10. A woman worked for 6 months of the year and made \$5,058. How much did she make each month?

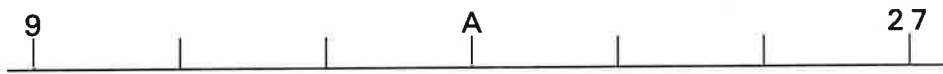
\_\_\_\_\_



1. Find the interval, and then figure out what  $A$  is on each of the following number lines.



A = \_\_\_\_\_



A = \_\_\_\_\_

2. Write 638 using words. \_\_\_\_\_

Write three hundred fifty-seven using numbers. \_\_\_\_\_

3. Factor 24 three ways. \_\_\_\_\_

Factor 16 two ways. \_\_\_\_\_

To find the *average* of a set of numbers, follow these two steps:

- 1) Add up all the numbers.
- 2) Divide the sum by how many numbers there are.

Example:

Find the average of 3, 7, and 11.

$$\begin{array}{r}
 3 \\
 7 \\
 + 11 \\
 \hline
 21
 \end{array}$$

$$\begin{array}{r}
 7 \\
 3 \overline{) 21} \\
 \hline
 \phantom{0}
 \end{array}$$

Answer = 7

**Solve the following problems.**

1. Find the average of 5, 7, and 12. \_\_\_\_\_
2. Find the average of 6, 8, 10, 16, and 20. \_\_\_\_\_
3. Find the average of 148, 247, and 352. \_\_\_\_\_
4. Find the average of 5, 11, 15, and 17. \_\_\_\_\_
5. Find the average of 6, 9, 15, 18, 32, 40, and 90. \_\_\_\_\_
6. Find the average of 500 and 800. \_\_\_\_\_
7. A boy was playing a game and on ten tries made the following scores.
  - First try—4
  - Second try—6
  - Third try—2
  - Fourth try—12
  - Fifth try—12
  - Sixth try—12
  - Seventh try—23
  - Eighth try—22
  - Ninth try—24
  - Tenth try—43

What was his average score for the ten tries?

\_\_\_\_\_

Remember to follow two steps to find an average:

- 1) Add up all the numbers.
- 2) Divide the sum by how many numbers there are.

**Solve the following problems.**

1. Find the average of 15, 33, 42, 78, and 102. \_\_\_\_\_
2. Find the average of 563 and 395. \_\_\_\_\_
3. Find the average of 4, 5, 8, 45, 66, and 70. \_\_\_\_\_
4. Find the average of 32, 43, and 51. \_\_\_\_\_
5. Below are the temperatures taken at six times during the day.

Dawn	41°
9 A.M.	50°
Noon	60°
3 P.M.	75°
6 P.M.	70°
Midnight	40°

What was the average temperature of the day? \_\_\_\_\_

6. There are 3 people in a family. Here are their weights.

Papa	210 pounds
Mama	136 pounds
Junior	86 pounds

What is the average weight of the people in the family? \_\_\_\_\_

Find the interval, and then figure out what *A* should be on each of the following number lines.



A = \_\_\_\_\_



A = \_\_\_\_\_



A = \_\_\_\_\_

Write the following numbers as words.

4. 908 \_\_\_\_\_

\_\_\_\_\_

5. 312 \_\_\_\_\_

\_\_\_\_\_

6. 594 \_\_\_\_\_

\_\_\_\_\_

7. 248 \_\_\_\_\_

\_\_\_\_\_

Write the following words as numbers.

8. three hundred fifty-nine \_\_\_\_\_

9. five hundred two \_\_\_\_\_

10. nine hundred eleven \_\_\_\_\_

11. four hundred ninety-six \_\_\_\_\_

Write the factors of each of the following numbers. Some numbers may have more than one set of factors. If a number is prime, write *prime* on the line.

12. 4 \_\_\_\_\_ 13. 7 \_\_\_\_\_

14. 14 \_\_\_\_\_ 17. 12 \_\_\_\_\_

15. 25 \_\_\_\_\_ 18. 23 \_\_\_\_\_

16. 6 \_\_\_\_\_ 19. 33 \_\_\_\_\_

20. Factor 50 two ways. \_\_\_\_\_

\_\_\_\_\_

21. Factor 100 four ways. \_\_\_\_\_

\_\_\_\_\_

22.  $(8 \times 7) + \underline{\hspace{2cm}} = 100$

23. 
$$7 \overline{) 1813}$$

24. 
$$9 \overline{) 7317}$$

25. 
$$8 \overline{) 1344}$$

26.  $6559 \div 6 = \underline{\hspace{2cm}}$

27.  $75310 \div 8 = \underline{\hspace{2cm}}$

28. Bobby and 2 of his friends will take a bicycle trip through Vermont. They plan to travel about 45 miles each day. How far can they go in 9 days?

\_\_\_\_\_

29. How many cents could you get for 73 nickels?

\_\_\_\_\_

30. A jet travels 3,378 miles in 6 hours. How far is it traveling each hour?

\_\_\_\_\_

Solve the following problems.

1. Find the average of 8, 5, 4, 100, 3, 77, and 6. \_\_\_\_\_
2. Find the average of 23, 10, 2, 66, and 9. \_\_\_\_\_
3. Find the average of 15, 21, and 39. \_\_\_\_\_
4. Find the average of 100, 340, 800, and 80. \_\_\_\_\_
5. Find the average of 9, 4, 7, 2, 10, 11, and 6. \_\_\_\_\_
6. Find the average of 100 and 200. \_\_\_\_\_
7. During one week a girl made the following amounts of money at her lemonade stand.  
Monday      25¢  
Tuesday     46¢  
Wednesday 54¢  
Thursday    85¢  
Friday       55¢  
What were her average daily earnings? \_\_\_\_\_
8. In one family, people are the following ages: 11, 15, 34, 39, and 81.  
What is the average age \_\_\_\_\_
9. There are five boys on a basketball team. Their heights are given below.  
Shorty      2 feet tall  
Elmo        8 feet tall  
Fatso        4 feet tall  
Butch        6 feet tall  
Beanstalk 10 feet tall  
What is the average height of the team? \_\_\_\_\_

Solve the following problems.

1. What is the average of 3, 5, 7, 9, and 16? \_\_\_\_\_

2. What is the average of 600 and 900? \_\_\_\_\_

3. What is the average of 547, 928, and 1,003? \_\_\_\_\_

4. A taxi driver makes the following amounts during a week of driving.

Monday \$24.50

Tuesday \$21.35

Wednesday \$34.75

Thursday \$15.00

Friday \$45.46

Saturday \$20.40

What is his average daily income for the six days? \_\_\_\_\_

5. In seven different games, a basketball player makes the following scores.

First game 43 points

Second game 23 points

Third game 60 points

Fourth game 26 points

Fifth game 87 points

Sixth game 33 points

Seventh game 22 points

What is his average score for the seven games? \_\_\_\_\_

6. A man earned \$11,254 one year and \$14,368 the next.

What is the average he made for the 2 years? \_\_\_\_\_

Work out the problems on this page.

1. Find the average of 14, 17, 19, 29, and 36. \_\_\_\_\_
2. Find the average of 300 and 800. \_\_\_\_\_
3. A man works selling books from door to door. In one week, he sells the following amounts.

Monday	14
Tuesday	12
Wednesday	9
Thursday	35
Friday	2
Saturday	24

What is his average daily sale of books that week? \_\_\_\_\_
4. A woman works for five months and makes the following amounts.

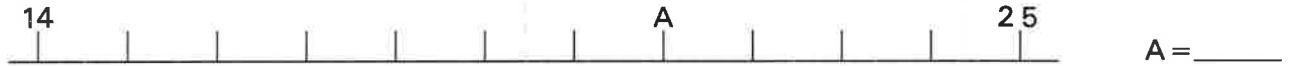
February	\$326
March	\$521
April	\$112
May	\$400
June	\$231

What is her average monthly earning for those months? \_\_\_\_\_
5. On his spelling tests a boy made the following scores.

Test 1	96%
Test 2	60%
Test 3	75%
Test 4	79%
Test 5	95%

What was his average score? \_\_\_\_\_

1. Find the interval, and then figure out what  $A$  is on each of the following number lines.



2. Write 907 using words. \_\_\_\_\_

Write seven hundred eighty using numbers. \_\_\_\_\_

3. Circle the numbers that are prime.

2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21

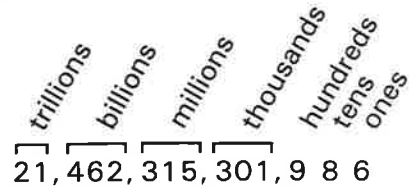
4. Apply the four steps used in division to solve the following two problems.

$6202 \div 7 =$  \_\_\_\_\_

$3624 \div 6 =$  \_\_\_\_\_



Look at the big number below and learn the *place values*.



Answer the following questions about the big number above. Answer in words.

1. How many thousands are there? \_\_\_\_\_ thousands
2. How many trillions are there? \_\_\_\_\_ trillions
3. How many hundreds are there? \_\_\_\_\_ hundreds
4. How many millions are there? \_\_\_\_\_ millions
5. How many tens are there? \_\_\_\_\_ tens
6. How many billions are there? \_\_\_\_\_ billions
7. How many ones are there? \_\_\_\_\_ ones

Use words to answer the following questions.

8. How many thousands are there in 54,821? \_\_\_\_\_ thousands
9. How many tens are there in 43,850? \_\_\_\_\_ tens
10. How many millions are there in 23,410,354? \_\_\_\_\_ millions
11. How many ones are there in 342,579? \_\_\_\_\_ ones
12. How many billions are there in 25,345,101,292? \_\_\_\_\_ billions
13. How many thousands are there in 243,546,910,243,321? \_\_\_\_\_  
\_\_\_\_\_ thousands

Now write the following numbers as words.

Example:

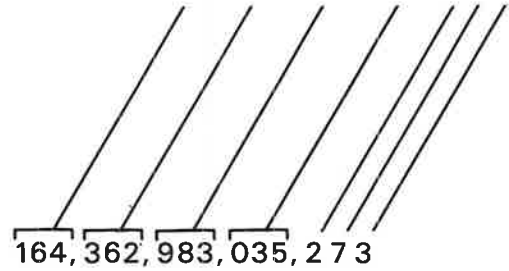
41,000 forty-one thousand

14. 29,000,000 \_\_\_\_\_
15. 15,000,000,000 \_\_\_\_\_
16. 71,000,000,000,000 \_\_\_\_\_
17. 351,000,000 \_\_\_\_\_
18. 225,000 \_\_\_\_\_

Write the following place values on the correct lines above the numbers.

Choose your answers from the list below.

- ones
- tens
- hundreds
- thousands
- millions
- billions
- trillions



Use words to answer the following questions about the big number above.

Example: How many thousands are in the big number? thirty-five thousands

1. How many billions? \_\_\_\_\_
2. How many tens? \_\_\_\_\_
3. How many hundreds? \_\_\_\_\_
4. How many millions? \_\_\_\_\_
5. How many trillions? \_\_\_\_\_
6. How many ones? \_\_\_\_\_

Use words to answer the following questions.

7. How many thousands in 32,457,648,211? \_\_\_\_\_
8. How many tens in 32,470? \_\_\_\_\_
9. How many millions in 54,981,001,213? \_\_\_\_\_
10. How many hundreds in 34,576,960? \_\_\_\_\_

Now write the following numbers as words.

11. 35,000,000 \_\_\_\_\_
12. 421,000 \_\_\_\_\_
13. 900,000,000,000 \_\_\_\_\_
14. 314,000,000,000,000 \_\_\_\_\_

Now write the following words as numbers.

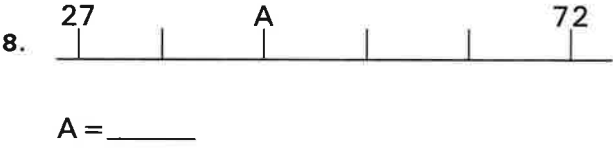
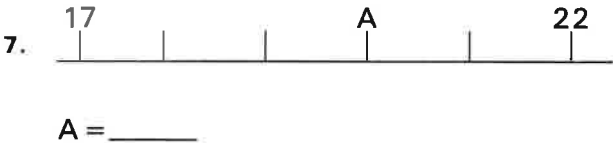
15. two hundred fifteen thousand \_\_\_\_\_
16. nineteen million \_\_\_\_\_

- Find the average of 13, 28, and 7.  
\_\_\_\_\_
- Find the average of 35, 12, 13, 10, and 45.  
\_\_\_\_\_
- Find the average of 300 and 450.  
\_\_\_\_\_

- Write down the two steps you use to find an average.
  - 1) \_\_\_\_\_
  - 2) \_\_\_\_\_

- $(8 \times 7) + (4 \times 3) + (10 \times 10) =$  \_\_\_\_\_
- $(9 \times 4) +$  \_\_\_\_\_  $= 100$

Find the interval, and then figure out what **A** should be on each of the following number lines.



- Factor 100 four ways.  
\_\_\_\_\_  
\_\_\_\_\_

- $49072 \div 8 =$  \_\_\_\_\_
- $4944 \div 6 =$  \_\_\_\_\_
- $4368 \div 7 =$  \_\_\_\_\_
- $4172 \div 5 =$  \_\_\_\_\_
- $25215 \div 7 =$  \_\_\_\_\_
- $4219 \div 6 =$  \_\_\_\_\_

Circle the prime numbers.

16. 

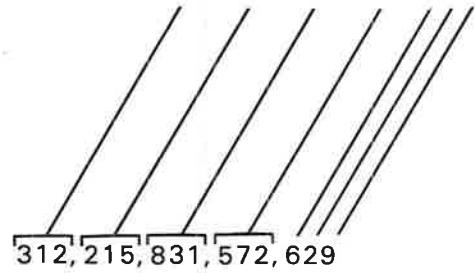
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40

- A train is chugging along at a steady speed of 48 miles an hour. How far can it go in 9 hours?  
\_\_\_\_\_

- An elevator has a capacity of 1,000 pounds. Several people get on it. They are Michael, who weighs 247 pounds; Jose, who weighs 145 pounds; Brenda, who weighs 121 pounds; Big Eddie, who weighs 399 pounds; and Slim Jim, who weighs 81 pounds. Is the elevator overloaded? Explain.  
\_\_\_\_\_  
\_\_\_\_\_

- A man wins \$1,512 at the dog track. He decides to divide the money evenly among his 7 children. How much does each of the children get?  
\_\_\_\_\_

Write in the place values on the lines above the numbers to the right.



Use words to answer the following questions about the number above.

1. How many hundreds are there? \_\_\_\_\_
2. How many billions are there? \_\_\_\_\_
3. How many thousands? \_\_\_\_\_
4. How many millions? \_\_\_\_\_
5. How many ones? \_\_\_\_\_
6. How many trillions? \_\_\_\_\_
7. How many tens? \_\_\_\_\_

Now write the following numbers as words.

8. 44,000,000 \_\_\_\_\_
9. 350,000 \_\_\_\_\_
10. 218,000,000,000 \_\_\_\_\_
11. 875,000,000,000,000 \_\_\_\_\_
12. 367,000,000 \_\_\_\_\_

Now write the following words as numbers.

13. twenty-four million \_\_\_\_\_
14. five hundred thirty-eight thousand \_\_\_\_\_
15. seven hundred fifty-three million \_\_\_\_\_
16. two hundred thousand \_\_\_\_\_
17. six hundred eighteen trillion \_\_\_\_\_

Put commas in the following number. Start at the *right* and work to the *left*. Put a comma after every three numbers. Then on the line below the number, write how many millions there are.

18. 2 5 6 8 9 4 3 7 8 4 0 2 9 1 0 5

\_\_\_\_\_

Put commas in the number below. Start at the right and work to the left. Put a comma after every three numbers.

6 3 9 4 7 8 9 3 5 6 0 1 2 3 5 7

Use words to answer the following questions about the number above.

1. How many thousands? \_\_\_\_\_
2. How many millions? \_\_\_\_\_
3. How many ones? \_\_\_\_\_
4. How many trillions? \_\_\_\_\_  
\_\_\_\_\_
5. How many tens? \_\_\_\_\_
6. How many billions? \_\_\_\_\_
7. How many hundreds? \_\_\_\_\_

Write the following numbers as words.

8. 39,000,000 \_\_\_\_\_
9. 215,000 \_\_\_\_\_
10. 437,000,000,000,000 \_\_\_\_\_
11. 298,000,000,000 \_\_\_\_\_
12. 501,000 \_\_\_\_\_

Write the following words as numbers.

13. eight hundred seventy-three million \_\_\_\_\_
14. three hundred eighteen trillion \_\_\_\_\_
15. one hundred eleven thousand \_\_\_\_\_
16. twenty-five billion \_\_\_\_\_
17. two hundred seventeen thousand \_\_\_\_\_

# Test 7—Place Value

Put commas in the number below.

3 5 8 2 1 3 1 4 6 2 9 2 9 7

Use words to answer the following questions about the number above.

1. How many tens in the number? \_\_\_\_\_
2. How many millions? \_\_\_\_\_
3. How many trillions? \_\_\_\_\_
4. How many ones? \_\_\_\_\_
5. How many hundreds? \_\_\_\_\_
6. How many thousands? \_\_\_\_\_
7. How many billions? \_\_\_\_\_

Write the following numbers as words.

8. 35,000 \_\_\_\_\_
9. 245,000,000,000,000 \_\_\_\_\_
10. 701,000,000 \_\_\_\_\_
11. 815,000,000,000 \_\_\_\_\_

Write the following words as numbers.

12. six hundred fifty-three million \_\_\_\_\_
13. two hundred forty-eight thousand \_\_\_\_\_
14. nine hundred billion \_\_\_\_\_
15. six hundred twelve trillion \_\_\_\_\_
16. nineteen thousand \_\_\_\_\_
17. twelve million \_\_\_\_\_
18. eight hundred ninety-seven billion \_\_\_\_\_
19. seventy-five million \_\_\_\_\_

Circle the number that has two hundred nineteen millions.

- |                     |                     |
|---------------------|---------------------|
| 20. 219,000,678,245 | 684,291,371,428     |
| 209,000,381         | 846,349,219,384,021 |

1. Find the interval, and then figure out what  $A$  is on each of the following number lines.



2. Write 917 using words. \_\_\_\_\_

Write two hundred nineteen using numbers. \_\_\_\_\_

3. Factor 12 two ways. \_\_\_\_\_

Factor 30 two ways. \_\_\_\_\_

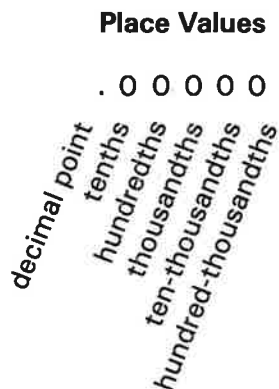
4.  $3437 \div 6 =$  \_\_\_\_\_

$3990 \div 7 =$  \_\_\_\_\_

5. Find the average of 74, 48, and 19. \_\_\_\_\_

Find the average of 103 and 205. \_\_\_\_\_

The numbers to the right of the decimal point ( . ) are called *decimal fractions*. Learn the place values used with decimal fractions.



Use words to give the place values of each of the following decimal fractions.

- |                             |                 |
|-----------------------------|-----------------|
| .3 _____ three tenths _____ | 6. .0012 _____  |
| 1. .03 _____                | _____           |
| 2. .003 _____               | 7. .1 _____     |
| 3. .5 _____                 | 8. .00004 _____ |
| 4. .007 _____               | _____           |
| 5. .12 _____                | 9. .55 _____    |

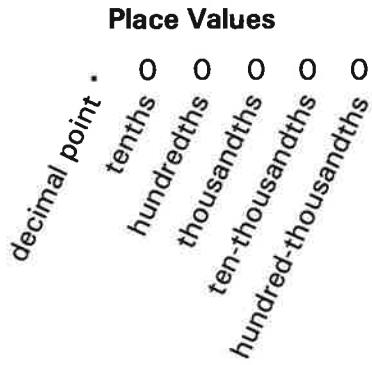
Write the following words as decimal fractions. Use numbers and decimal points.

- six tenths \_\_\_\_\_ .6 \_\_\_\_\_
10. six hundredths \_\_\_\_\_
  11. six thousandths \_\_\_\_\_
  12. two hundredths \_\_\_\_\_
  13. seven hundred-thousandths \_\_\_\_\_
  14. eight tenths \_\_\_\_\_
  15. nine hundredths \_\_\_\_\_
  16. five ten-thousandths \_\_\_\_\_
  17. seventeen hundredths \_\_\_\_\_
  18. twelve thousandths \_\_\_\_\_

First, use words to write the following fractions. Then write each as a decimal fraction.

- |                        |            |       |
|------------------------|------------|-------|
| $\frac{2}{10}$         | two tenths | .2    |
| 19. $\frac{3}{10,000}$ | _____      | _____ |
| 20. $\frac{4}{1,000}$  | _____      | _____ |
| 21. $\frac{13}{100}$   | _____      | _____ |
| 22. $\frac{9}{1,000}$  | _____      | _____ |
| 23. $\frac{7}{100}$    | _____      | _____ |





Use words to write the following decimal fractions.

- .02 two hundredths
1. .005 \_\_\_\_\_
  2. .9 \_\_\_\_\_
  3. .0009 \_\_\_\_\_
  4. .07 \_\_\_\_\_
  5. .001 \_\_\_\_\_
  6. .3 \_\_\_\_\_
  7. .11 \_\_\_\_\_
  8. .00011 \_\_\_\_\_
  9. .082 \_\_\_\_\_

Now write the following words as decimal fractions. Use numbers and decimal points.

- two tenths .2
10. two hundredths \_\_\_\_\_
  11. two thousandths \_\_\_\_\_
  12. six hundredths \_\_\_\_\_
  13. twelve hundredths \_\_\_\_\_
  14. twelve ten-thousandths \_\_\_\_\_
  15. six tenths \_\_\_\_\_

16. sixteen thousandths \_\_\_\_\_
17. forty-five hundredths \_\_\_\_\_
18. sixty-two thousandths \_\_\_\_\_

Write the following fractions as decimal fractions. Use numbers and decimal points.

19.  $\frac{4}{100}$  \_\_\_\_\_
20.  $\frac{6}{10}$  \_\_\_\_\_
21.  $\frac{2}{1,000}$  \_\_\_\_\_
22.  $\frac{17}{100,000}$  \_\_\_\_\_
23.  $\frac{9}{10}$  \_\_\_\_\_

First use words to write the following decimal fractions. Then write the fraction without using a decimal point.

- Example:  
 .02 two hundredths  $\frac{2}{100}$
24. .8 \_\_\_\_\_
  25. .09 \_\_\_\_\_
  26. .007 \_\_\_\_\_
  27. .11 \_\_\_\_\_
  28. .011 \_\_\_\_\_
  29. .931 \_\_\_\_\_
  30. .017 \_\_\_\_\_

Write the following numbers as words.

1. 54,000,000 \_\_\_\_\_  
\_\_\_\_\_
2. 29,000,000,000,000 \_\_\_\_\_  
\_\_\_\_\_
3. 301,000 \_\_\_\_\_  
\_\_\_\_\_
4. 254,000,000,000 \_\_\_\_\_  
\_\_\_\_\_

Write the following words as numbers.

5. seventeen trillion  
\_\_\_\_\_
6. twenty-nine thousand  
\_\_\_\_\_
7. four hundred seventeen million  
\_\_\_\_\_
8. ninety-two billion  
\_\_\_\_\_

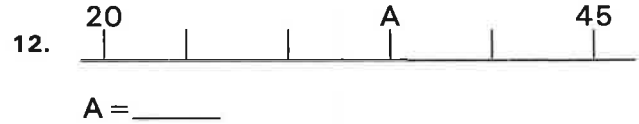
Put commas in the correct places in the number below. On the line write how many millions are in the number.

9. 34612002499824183  
\_\_\_\_\_  
\_\_\_\_\_

10.  $(8 \times 5) + (9 \times 4) + (10 \times 3) =$  \_\_\_\_\_

11.  $(7 \times 6) +$  \_\_\_\_\_  $= 100$

Find the interval and then figure out what A should be on the line below.



Factor 36 four ways.

13. \_\_\_\_\_  
\_\_\_\_\_

14.  $24512 \div 8 =$  \_\_\_\_\_

15.  $42583 \div 7 =$  \_\_\_\_\_

16. Find the average of 21, 60, and 27.  
\_\_\_\_\_

17. Find the average of 15, 47, 29, and 33.  
\_\_\_\_\_

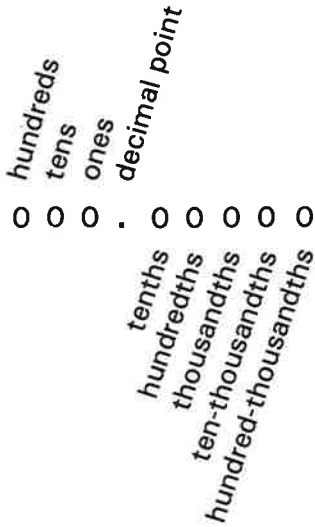
18. Find the average of 197 and 211.  
\_\_\_\_\_

19. There are 3 people on a team. Sandra weighs 366 pounds; Stu weighs 244 pounds; and Jo-Jo weighs 203 pounds. What is the average weight of the people on the team?  
\_\_\_\_\_

20. A woman makes \$47 a day. How much does she make in 8 days of work?  
\_\_\_\_\_

21. A man makes \$19,365 in 1 year. He has to pay \$7,356 in taxes to the federal government. How much does he have left after taxes?  
\_\_\_\_\_

Use words to write the following numbers. Write the whole number first; then write *and* when you get to the decimal point.



2.4 \_\_\_\_\_ two and four tenths

1. 3.04 \_\_\_\_\_

2. 1.001 \_\_\_\_\_

3. 4.09 \_\_\_\_\_

4. 2.003 \_\_\_\_\_

5. 8.2 \_\_\_\_\_

6. 12.02 \_\_\_\_\_

7. 16.0006 \_\_\_\_\_

8. 11.02 \_\_\_\_\_

9. 6.016 \_\_\_\_\_

10. 25.25 \_\_\_\_\_

11. 4.014 \_\_\_\_\_

Write the following words as decimal fractions.

12. two and three tenths \_\_\_\_\_

13. six and one hundredth \_\_\_\_\_

14. twelve and one tenth \_\_\_\_\_

15. seven and six hundred-thousandths \_\_\_\_\_

16. two and two hundredths \_\_\_\_\_

17. sixteen and six thousandths \_\_\_\_\_

18. two and four tenths \_\_\_\_\_

19. forty-five and sixteen thousandths \_\_\_\_\_

Change the following to decimal fractions.

$2\frac{7}{10}$  \_\_\_\_\_ 2.7

20.  $3\frac{7}{10,000}$  \_\_\_\_\_

21.  $4\frac{3}{100}$  \_\_\_\_\_

22.  $7\frac{14}{1,000}$  \_\_\_\_\_

Now change these to fractions.

$\frac{7}{100}$  .07 = \_\_\_\_\_ 25. .013 = \_\_\_\_\_

23. .45 = \_\_\_\_\_ 26. .971 = \_\_\_\_\_

24. .001 = \_\_\_\_\_ 27. .4 = \_\_\_\_\_

Use words to write the following numbers. Write the whole number first; then write *and* when you get to the decimal point.

1. 4.05 \_\_\_\_\_
2. 3.001 \_\_\_\_\_
3. 7.21 \_\_\_\_\_
4. 9.004 \_\_\_\_\_
5. 28.01 \_\_\_\_\_
6. 9.11 \_\_\_\_\_
7. 80.005 \_\_\_\_\_
8. 12.013 \_\_\_\_\_
9. 2.016 \_\_\_\_\_
10. 26.001 \_\_\_\_\_

Write the following decimal fractions as fractions.

11. .01 \_\_\_\_\_
12. .9 \_\_\_\_\_
13. .003 \_\_\_\_\_
14. .137 \_\_\_\_\_

Write the following words as decimal fractions.

15. seventeen and six tenths \_\_\_\_\_
16. twelve and two hundredths \_\_\_\_\_
17. six and four thousandths \_\_\_\_\_
18. nine and sixty-three hundredths \_\_\_\_\_
19. twenty-seven and forty-seven thousandths \_\_\_\_\_
20. fifty-four and seven tenths \_\_\_\_\_
21. two hundred and six hundredths \_\_\_\_\_
22. forty-two and sixteen thousandths \_\_\_\_\_

Change the following to decimal fractions.

23.  $6\frac{2}{10}$  \_\_\_\_\_
24.  $4\frac{23}{100}$  \_\_\_\_\_
25.  $7\frac{2}{1000}$  \_\_\_\_\_
26.  $8\frac{13}{100}$  \_\_\_\_\_
27.  $12\frac{1}{100}$  \_\_\_\_\_
28.  $40\frac{2}{1000}$  \_\_\_\_\_
29.  $310\frac{5}{100}$  \_\_\_\_\_
30.  $51\frac{6}{10}$  \_\_\_\_\_

Write the following numbers as words.

- 1. 3.1 \_\_\_\_\_
- 2. 4.02 \_\_\_\_\_
- 3. 1.005 \_\_\_\_\_
- 4. 12.09 \_\_\_\_\_
- 5. 24.11 \_\_\_\_\_
- 6. 2.032 \_\_\_\_\_
- 7. 40.2 \_\_\_\_\_
- 8. 3.017 \_\_\_\_\_

Write the following words as numbers.

- 9. six and two hundredths \_\_\_\_\_
- 10. two and four tenths \_\_\_\_\_
- 11. twelve and sixteen hundredths \_\_\_\_\_
- 12. sixty-four and two hundredths \_\_\_\_\_
- 13. nine and fourteen thousandths \_\_\_\_\_
- 14. twenty-four and six thousandths \_\_\_\_\_
- 15. ninety-nine and ninety-nine hundredths \_\_\_\_\_

Write the following as decimal fractions.

- 16.  $2 \frac{4}{100}$  \_\_\_\_\_
- 17.  $6 \frac{23}{1000}$  \_\_\_\_\_
- 18.  $28 \frac{9}{10}$  \_\_\_\_\_
- 19.  $3 \frac{9}{100}$  \_\_\_\_\_
- 20.  $19 \frac{19}{1000}$  \_\_\_\_\_

# Review Test 8

5

1. Find the interval, and then figure out what  $A$  is on the following number line.



$A =$  \_\_\_\_\_

2. Write 794,000 in words. \_\_\_\_\_

Write six hundred ninety million in numbers. \_\_\_\_\_

3. Factor 28 two ways. \_\_\_\_\_

4.  $2546 \div 7 =$  \_\_\_\_\_

5. Find the average of 63, 81, 72, 40, and 24. \_\_\_\_\_

To add or subtract decimals, stack up the numbers with the decimal points in line. Then add or subtract.

Example:  $3.456 - 1.21$

Step one:

$$\begin{array}{r} 3.456 \\ - 1.21 \\ \hline \end{array}$$

Decimal point moves down

Step two:

$$\begin{array}{r} 3.456 \\ - 1.21 \\ \hline \end{array}$$

2.246 Answer

Now do the following problems. Follow the steps shown above.

Remember: You may need to borrow in subtraction problems.

1.  $25.61 - 3.21$

2.  $296.42 + 5.1$

3.  $385.2 + 49.6$

4.  $24.64 - 5.23$

5.  $854.2 + 35.1$

6.  $656.42 - 5.39$

7.  $296.3 - 54.4$

8.  $289.6 + 38.4$

9.  $496.27 + 38.37$

10.  $294.65 - 59.1$

11.  $5842.6 - 35.9$

Now do this problem by following the same steps.

12. At the beginning of a trip to Atlanta, your car's odometer read 18,354.3 miles.

When you got to Atlanta, it read 19,063.1.

How far did you drive?

\_\_\_\_\_ miles

Remember: To add or subtract decimals, line up the decimal points first.

Example:  $24.95 - 3.9$

$$\begin{array}{r} 24.95 \\ - 3.9 \\ \hline 21.05 \end{array} \text{ Answer}$$

Do the following problems.

1.  $2.5 - 1.3$

2.  $2.56 + 1.3$

3.  $8.39 + 1.41$

4.  $21.39 - 1.56$

5.  $85.62 - 1.39$

6.  $11.39 - 2.4$

7.  $8.24 + 1.3$

8.  $4.963 - 2.9$

You can add zeroes (0s) after the last number following a decimal point without changing the value of the number.

Example:  $6.2 = 6.20$

$6.2 = 6.200$

but  $6.2$  is not  $6.02!$

Circle *T* (true) or *F* (false).

9.  $5.61 = 5.610$       T    F

10.  $5.61 = 5.061$       T    F

11.  $5.61 = 5.601$       T    F

12.  $4.2 = 4.200$       T    F

13.  $5.73 = 5.073$       T    F

14.  $5.703 = 5.7030$     T    F

15.  $6.21 = 6.21000$     T    F

16.  $6.30 = 6.3$       T    F

17.  $6.301 = 6.3010$     T    F

18.  $8.402 = 8.420$       T    F

Add two 0s (zeroes) to each of these so that the value of the number stays the same.

19.  $5.3$  \_\_\_\_\_

20.  $6.41$  \_\_\_\_\_

21.  $8.935$  \_\_\_\_\_

22.  $10.301$  \_\_\_\_\_

23.  $4.02$  \_\_\_\_\_

24.  $5.039$  \_\_\_\_\_

25.  $6.0301$  \_\_\_\_\_

26.  $8.643$  \_\_\_\_\_

27.  $9.02$  \_\_\_\_\_



Write the following numbers as words.

1. 9.1 \_\_\_\_\_  
\_\_\_\_\_
2. 1.004 \_\_\_\_\_  
\_\_\_\_\_
3. 19.012 \_\_\_\_\_  
\_\_\_\_\_
4. 1.23 \_\_\_\_\_  
\_\_\_\_\_

Write the following words as decimals.

5. two and three thousandths  
\_\_\_\_\_
6. four and eleven hundredths  
\_\_\_\_\_
7. one and one tenth  
\_\_\_\_\_
8. five and thirteen thousandths  
\_\_\_\_\_

Find the interval, and then figure out what *A* is on the following line.



A = \_\_\_\_\_

10. Factor 80 four ways.  
\_\_\_\_\_  
\_\_\_\_\_
11.  $50560 \div 8 =$  \_\_\_\_\_
12.  $42589 \div 7 =$  \_\_\_\_\_
13. Find the average of 99 and 87.  
\_\_\_\_\_

14. Find the average of 38, 46, 22, and 30.  
\_\_\_\_\_

Write the following numbers as words.

15. 215,000,000 \_\_\_\_\_  
\_\_\_\_\_
16. 630,000 \_\_\_\_\_  
\_\_\_\_\_
17. 714,000,000,000,000 \_\_\_\_\_  
\_\_\_\_\_
18. 48,000,000,000 \_\_\_\_\_  
\_\_\_\_\_

Write the following words as numbers.

19. twelve billion  
\_\_\_\_\_
20. four hundred seventeen trillion  
\_\_\_\_\_
21. two hundred three million  
\_\_\_\_\_
22. A cab driver made \$37 on Monday, \$48 on Tuesday, \$60 on Wednesday, \$34 on Thursday, \$3 on Friday, and \$94 on Saturday. How much did he make all together?  
\_\_\_\_\_
23. What was the cab driver's average daily earning?  
\_\_\_\_\_
24. A girl eats 7 bags of onion-flavored potato chips a day. How many bags does she eat a year? (There are 365 days in a year.)  
\_\_\_\_\_

Sometimes you need to add zeroes (0s) before you can subtract.

Example:

$$\begin{array}{r} 6.3 - 4.21 = \\ \quad \quad \quad \underline{-4.21} \end{array} = \begin{array}{r} 6.30 \\ \quad \quad \quad \underline{-4.21} \\ 2.09 \end{array} \text{ Answer}$$

Do the following problems. Remember to add zeroes (0s) when you need to.

1.  $2.5 - 1.48$                       2.  $3.6 - 1.25$                       3.  $10.3 - 4.21$                       4.  $15.6 - 5.29$

5.  $24.54 - 3.1$                       6.  $64.28 + 3.1$                       7.  $64.1 - 3.28$                       8.  $56.75 + 3.11$

9.  $4.02 - 3.001$                       10.  $5.63 - 2.002$                       11.  $5.1 - 4.209$                       12.  $6.2 - 3.44$

Now do the following word problem.

13. You had \$5.65. You spent \$1.95 on Bubble Yum. How much money do you have left?

---

A number always has a decimal point, but sometimes you can't see it. If you can't, it's at the end of the number.

Example:

4 is 4.  
and  
6239 is 6239.

Supply the decimal points in the numbers below.

4

21

310

4286

Study the following subtraction examples.

Example:

$$4 - 1.3$$

$$\begin{array}{r} 4. \\ -1.3 \\ \hline \end{array}$$

You supply the decimal point.

$$\begin{array}{r} 4.0 \\ -1.3 \\ \hline \end{array}$$

Add a zero.

Example:

$$5 - 3.44$$

$$\begin{array}{r} 5.00 \\ -3.44 \\ \hline 1.56 \end{array}$$

Answer

Example:

$$6.4 - 3$$

$$\begin{array}{r} 6.4 \\ -3. \\ \hline 3.4 \end{array}$$

Answer

Do the following problems.

1.  $6 - 3.4$

2.  $12 - 5.2$

3.  $35 - 3.1$

4.  $240 - 5.1$

5.  $295 - 290.4$

6.  $56.2 - 3.48$

7.  $5.48 + 3.2$

8.  $10.2 - 6$

9.  $51 - 39.7$

10.  $40 + 30.5$

11.  $21.46 - 3.111$

12.  $25 - 3.11$

13.  $46 - 2.14$

14.  $30 - 1.01$

15.  $25.671 + 4$

## Test 9 – Adding and Subtracting Decimals

10

Do all the following problems.

$$\begin{array}{r} 1. \quad 4.29 \\ + 1.13 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 15.35 \\ - 4.2 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 403.6 \\ + 2.71 \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 29 \\ - .49 \\ \hline \end{array}$$

Now do these problems.

5.  $56.56 + 3.42$

6.  $249.45 - 5.9$

7.  $606.06 + .6$

8.  $29.9 + 3.111$

9.  $50 - 3.2$

10.  $243 - .6$

1. Find the interval, and then figure out what  $A$  is on the following number line.



2. Write 78,000,000 in words. \_\_\_\_\_

Write 214,000,000,000,000 in words. \_\_\_\_\_

Write sixty-five thousand in numbers. \_\_\_\_\_

Write nine hundred six billion in numbers. \_\_\_\_\_

3. Factor 40 three ways. \_\_\_\_\_

4.  $48295 \div 8 =$  \_\_\_\_\_

5. Find the average of 8, 23, 15, and 26. \_\_\_\_\_

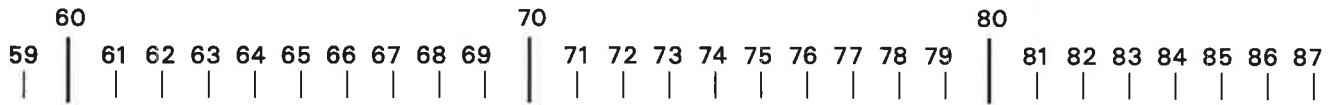
6. Use words to write 2.003. \_\_\_\_\_

Use numbers to write one and thirteen hundredths. \_\_\_\_\_

Use the number line below to *round off* the following numbers to the nearest ten. You must decide which ten is closer to the number – the one up or the one down.

Example:

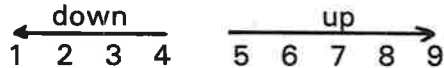
77 rounded off to the nearest ten is 80 because 77 is closer to 80 than it is to 70.



- |                                            |              |
|--------------------------------------------|--------------|
| 1. 64 _____ (Is it closer to 60 or 70?)    | 8. 69 _____  |
| 2. 76 _____ (Is it closer to 70 or 80?)    | 9. 84 _____  |
| 3. 71 _____                                | 10. 65 _____ |
| 4. 83 _____                                | 11. 61 _____ |
| 5. 66 _____                                | 12. 79 _____ |
| 6. 59 _____                                | 13. 82 _____ |
| 7. 75 _____ (5 goes up to the higher ten.) | 14. 62 _____ |

Without using a number line, round off the following numbers to the nearest ten.

Remember:



- |                                                                      |              |
|----------------------------------------------------------------------|--------------|
| 15. 46 _____ (Between <u>40</u> and <u>50</u> ;<br>closer to which?) | 22. 99 _____ |
| 16. 33 _____ (Between _____ and _____ ;<br>closer to which?)         | 23. 88 _____ |
| 17. 94 _____                                                         | 24. 51 _____ |
| 18. 22 _____                                                         | 25. 45 _____ |
| 19. 16 _____                                                         | 26. 87 _____ |
| 20. 54 _____                                                         | 27. 22 _____ |
| 21. 55 _____                                                         |              |

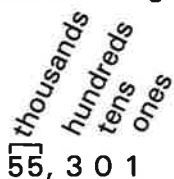
Now round off the following numbers to the nearest 100. (Look at the tens place to decide what each answer should be.)

- |                                                                         |               |
|-------------------------------------------------------------------------|---------------|
| 28. 142 _____ (Between <u>100</u> and <u>200</u> ;<br>closer to which?) | 30. 827 _____ |
| 29. 489 _____ (Between _____ and _____ ;<br>closer to which?)           | 31. 421 _____ |

Remember two things as you round off numbers:



- 2) When you are trying to decide whether to go up or down, always look one place value to the right to decide which way to go.  
For example, if you are rounding off a number to the nearest thousand, look at the hundreds place.



**Round off the numbers below to the nearest ten.**

1. 18 \_\_\_\_\_  
between \_\_\_\_\_ and \_\_\_\_\_
2. 24 \_\_\_\_\_
3. 93 \_\_\_\_\_
4. 35 \_\_\_\_\_
5. 29 \_\_\_\_\_
6. 21 \_\_\_\_\_
7. 86 \_\_\_\_\_
8. 75 \_\_\_\_\_
9. 38 \_\_\_\_\_
10. 54 \_\_\_\_\_
11. 12 \_\_\_\_\_
12. 98 \_\_\_\_\_
13. 73 \_\_\_\_\_
14. 81 \_\_\_\_\_

**Round off the numbers below to the nearest hundred.**

15. 732 \_\_\_\_\_  
between \_\_\_\_\_ and \_\_\_\_\_
16. 367 \_\_\_\_\_
17. 899 \_\_\_\_\_
18. 281 \_\_\_\_\_
19. 549 \_\_\_\_\_
20. 118 \_\_\_\_\_
21. 929 \_\_\_\_\_
22. 551 \_\_\_\_\_
23. 781 \_\_\_\_\_
24. 438 \_\_\_\_\_
25. 191 \_\_\_\_\_
26. 425 \_\_\_\_\_
27. 333 \_\_\_\_\_
28. 952 \_\_\_\_\_
29. 381 \_\_\_\_\_

**Round off the numbers below to the nearest thousand.**

30. 3,231 \_\_\_\_\_  
between \_\_\_\_\_ and \_\_\_\_\_
31. 5,387 \_\_\_\_\_
32. 1,735 \_\_\_\_\_
33. 2,111 \_\_\_\_\_
34. 4,298 \_\_\_\_\_
35. 5,432 \_\_\_\_\_
36. 6,592 \_\_\_\_\_
37. 5,102 \_\_\_\_\_
38. 4,298 \_\_\_\_\_
39. 4,104 \_\_\_\_\_
40. 2,555 \_\_\_\_\_
41. 6,500 \_\_\_\_\_
42. 2,323 \_\_\_\_\_
43. 11,531 \_\_\_\_\_
44. 34,231 \_\_\_\_\_

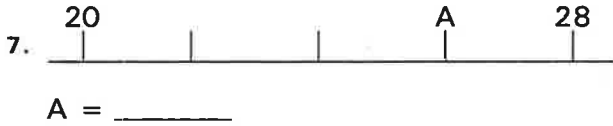
**Do the following problems.**

45. A man makes \$642 a month. In 9 months how much does he make? Round off your answer to the nearest thousand.
- \_\_\_\_\_

46. A dairy produces 174 eggs a day. In 7 days, how many eggs does it produce? Round off your answer to the nearest hundred.
- \_\_\_\_\_

1.  $63.9 + 4.38 + 293 =$  \_\_\_\_\_
2.  $44.5 + 87 + 2.001 =$  \_\_\_\_\_
3.  $556 + 2.3 + .882 =$  \_\_\_\_\_
4.  $67.4 - 21.431 =$  \_\_\_\_\_
5.  $12.8 - 1.437 =$  \_\_\_\_\_
6.  $735 - 1.529 =$  \_\_\_\_\_

Find the interval, and then figure out what *A* is on the following line.



Write the following numbers in words.

8. 83,000,000,000 \_\_\_\_\_  
\_\_\_\_\_
9. 207,000 \_\_\_\_\_  
\_\_\_\_\_

Write the following words as numbers.

10. nine hundred one trillion  
\_\_\_\_\_
11. four hundred million  
\_\_\_\_\_
12. Factor 24 three ways.  
\_\_\_\_\_  
\_\_\_\_\_
13.  $30582 \div 6 =$  \_\_\_\_\_
14. Find the average of 271 and 903.  
\_\_\_\_\_

Write the following numbers in words.

15. 2.03 \_\_\_\_\_  
\_\_\_\_\_
16. 7.1 \_\_\_\_\_  
\_\_\_\_\_
17. 4.005 \_\_\_\_\_  
\_\_\_\_\_
18. 2.11 \_\_\_\_\_  
\_\_\_\_\_

Write the following words in numbers.

19. five and twelve thousandths  
\_\_\_\_\_
20. one and one hundredth  
\_\_\_\_\_
21. Larry sells newspapers. On Monday he made \$23.45; on Tuesday he made \$35.00; on Wednesday he made \$13.25. What were his total earnings for the 3 days?  
\_\_\_\_\_
22. An old beat-up propeller plane goes 592 miles in 4 hours. How far does it go each hour?  
\_\_\_\_\_
23. A bank had \$379,218,100 in its vault. Then it was robbed of \$25,693,245. How much was left in the vault?  
\_\_\_\_\_
24. The principal of a school decided to give \$5 to each of the 618 students in the school. How much money did she decide to give away?  
\_\_\_\_\_



Round off the numbers below to the nearest ten.

- 16 20
1. 54 \_\_\_\_\_
  2. 39 \_\_\_\_\_
  3. 53 \_\_\_\_\_
  4. 43 \_\_\_\_\_
  5. 96 \_\_\_\_\_
  6. 39 \_\_\_\_\_
  7. 28 \_\_\_\_\_
  8. 41 \_\_\_\_\_
  9. 32 \_\_\_\_\_
  10. 55 \_\_\_\_\_

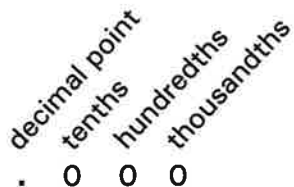
Round off the numbers below to the nearest hundred.

- 746 700
11. 329 \_\_\_\_\_
  12. 386 \_\_\_\_\_
  13. 466 \_\_\_\_\_
  14. 371 \_\_\_\_\_
  15. 388 \_\_\_\_\_
  16. 334 \_\_\_\_\_
  17. 722 \_\_\_\_\_
  18. 299 \_\_\_\_\_
  19. 281 \_\_\_\_\_
  20. 332 \_\_\_\_\_

Round off the numbers below to the nearest million.

- 3,423,985 3,000,000
21. 4,119,942 \_\_\_\_\_
  22. 7,455,232 \_\_\_\_\_
  23. 6,768,099 \_\_\_\_\_
  24. 2,313,222 \_\_\_\_\_
  25. 7,432,676 \_\_\_\_\_
  26. 2,500,343 \_\_\_\_\_
  27. 4,878,101 \_\_\_\_\_
  28. 3,245,868 \_\_\_\_\_
  29. 1,127,578 \_\_\_\_\_
  30. 24,249,022 \_\_\_\_\_

Remember to look one place value to the right of the decimal.



Round off these decimals to the nearest tenth.

- .26439 .3
31. .43543 \_\_\_\_\_
  32. .78221 \_\_\_\_\_
  33. .55631 \_\_\_\_\_
  34. .67222 \_\_\_\_\_
  35. .32289 \_\_\_\_\_
  36. .67556 \_\_\_\_\_

Round off these decimals to the nearest hundredth.

- .435234 .44
37. .254371 \_\_\_\_\_
  38. .878633 \_\_\_\_\_
  39. .576939 \_\_\_\_\_
  40. .212326 \_\_\_\_\_
  41. .434652 \_\_\_\_\_
  42. .356453 \_\_\_\_\_

Round off the numbers to the nearest ten.

1. 24 \_\_\_\_\_
2. 58 \_\_\_\_\_
3. 83 \_\_\_\_\_
4. 75 \_\_\_\_\_
5. 27 \_\_\_\_\_
6. 97 \_\_\_\_\_
7. 72 \_\_\_\_\_

Round off the numbers to the nearest thousand.

15. 8,324 \_\_\_\_\_
16. 6,549 \_\_\_\_\_
17. 2,314 \_\_\_\_\_
18. 6,502 \_\_\_\_\_
19. 5,999 \_\_\_\_\_
20. 3,671 \_\_\_\_\_
21. 4,218 \_\_\_\_\_

Round off the numbers to the nearest million.

29. 4,354,678 \_\_\_\_\_
30. 3,654,890 \_\_\_\_\_
31. 2,246,111 \_\_\_\_\_
32. 8,795,253 \_\_\_\_\_
33. 14,365,666 \_\_\_\_\_
34. 57,564,769 \_\_\_\_\_

Solve the following problems.

41. A farm grows 3,657 bushels of wheat. Rounded off to the nearest thousand, how many bushels is that?
- \_\_\_\_\_

Round off the numbers to the nearest hundred.

8. 746 \_\_\_\_\_
9. 687 \_\_\_\_\_
10. 399 \_\_\_\_\_
11. 251 \_\_\_\_\_
12. 931 \_\_\_\_\_
13. 365 \_\_\_\_\_
14. 374 \_\_\_\_\_

Round off the numbers to the nearest tenth.

22. .24316 \_\_\_\_\_
23. .67453 \_\_\_\_\_
24. .54627 \_\_\_\_\_
25. .24315 \_\_\_\_\_
26. .79576 \_\_\_\_\_
27. .24325 \_\_\_\_\_
28. .87956 \_\_\_\_\_

Round off the numbers to the nearest billion.

35. 8,342,576,887 \_\_\_\_\_
36. 1,546,887,593 \_\_\_\_\_
37. 3,555,476,998 \_\_\_\_\_
38. 7,324,154,734 \_\_\_\_\_
39. 9,763,656,259 \_\_\_\_\_
40. 1,223,530,239 \_\_\_\_\_

42. At one point the population of the United States was 209,654,768. Rounded off to the nearest million, what was the population?
- \_\_\_\_\_

Round off the numbers to the nearest ten.

- 1. 15 \_\_\_\_\_
- 2. 74 \_\_\_\_\_
- 3. 36 \_\_\_\_\_
- 4. 38 \_\_\_\_\_
- 5. 72 \_\_\_\_\_
- 6. 24 \_\_\_\_\_

Round off the numbers to the nearest thousand.

- 13. 5,498 \_\_\_\_\_
- 14. 4,879 \_\_\_\_\_
- 15. 1,242 \_\_\_\_\_
- 16. 8,644 \_\_\_\_\_
- 17. 2,501 \_\_\_\_\_
- 18. 19,354 \_\_\_\_\_

Round off the numbers to the nearest million.

- 25. 4,653,889 \_\_\_\_\_
- 26. 2,368,564 \_\_\_\_\_
- 27. 9,561,001 \_\_\_\_\_
- 28. 67,326,871 \_\_\_\_\_

Round off the numbers to the nearest hundred.

- 7. 845 \_\_\_\_\_
- 8. 469 \_\_\_\_\_
- 9. 261 \_\_\_\_\_
- 10. 971 \_\_\_\_\_
- 11. 785 \_\_\_\_\_
- 12. 358 \_\_\_\_\_

Round off the numbers to the nearest tenth.

- 19. .25447 \_\_\_\_\_
- 20. .43557 \_\_\_\_\_
- 21. .87967 \_\_\_\_\_
- 22. .53427 \_\_\_\_\_
- 23. .77684 \_\_\_\_\_
- 24. .56332 \_\_\_\_\_

Round off the numbers to the nearest billion.

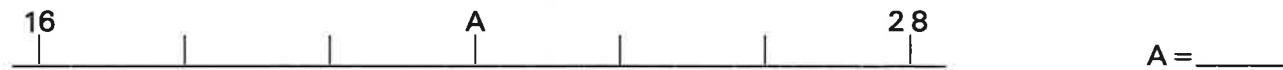
- 29. 8,643,667,217 \_\_\_\_\_
- 30. 8,974,112,310 \_\_\_\_\_
- 31. 7,436,547,291 \_\_\_\_\_
- 32. 6,500,000,001 \_\_\_\_\_

Solve the following problem.

- 33. The population of a country is 23,754,769 people. Rounded off to the nearest million, what is the population?

\_\_\_\_\_

1. Find the interval, and then figure out what  $A$  is on the following number line.



2. Use words to write 68,000,000,000. \_\_\_\_\_

Use numbers to write seven hundred four million. \_\_\_\_\_

3. Factor 56 three ways. \_\_\_\_\_

4.  $72308 \div 9 =$  \_\_\_\_\_

5. Find the average of 296 and 306. \_\_\_\_\_

6. Use words to write 3.05. \_\_\_\_\_

Use numbers to write seven and eleven thousandths. \_\_\_\_\_

7.  $35 + 283.19 =$  \_\_\_\_\_

8.  $5.9 - 3.186 =$  \_\_\_\_\_

To multiply, follow the steps below.

1) Multiply by the first number.  
(In the example below, it is 3.)

2) Multiply by the second number.  
(In the example below, it is 2.)  
Move the answer over one place to the left.

3) Draw a line and add to get the answer.

Example:

$$\begin{array}{r} 421 \\ \times 23 \\ \hline \end{array}$$

$$\begin{array}{r} 421 \\ \times 23 \\ \hline 1263 \end{array}$$

$$\begin{array}{r} 421 \\ \times 23 \\ \hline 1263 \\ 842 \end{array}$$

$$\begin{array}{r} 421 \\ \times 23 \\ \hline 1263 \\ + 842 \\ \hline 9,683 \text{ Answer} \end{array}$$

Use the multiplication steps shown above to do the following problems.

1. 
$$\begin{array}{r} 821 \\ \times 35 \\ \hline \end{array}$$

2. 
$$\begin{array}{r} 345 \\ \times 82 \\ \hline \end{array}$$

3. 
$$\begin{array}{r} 209 \\ \times 64 \\ \hline \end{array}$$

4. 
$$\begin{array}{r} 219 \\ \times 83 \\ \hline \end{array}$$

5. 
$$\begin{array}{r} 362 \\ \times 67 \\ \hline \end{array}$$

6. 
$$\begin{array}{r} 814 \\ \times 29 \\ \hline \end{array}$$

7. 
$$\begin{array}{r} 204 \\ \times 82 \\ \hline \end{array}$$

8. 
$$\begin{array}{r} 1345 \\ \times 63 \\ \hline \end{array}$$

Now solve the following two problems.

9. A man's heart beats 63 times a minute. How many times does it beat in 25 minutes?

\_\_\_\_\_

10. A man makes \$214 a week. How much can he make in 24 weeks?

\_\_\_\_\_

Use the multiplication steps you have learned to solve the following problems. See if you can get them all right!

1. 
$$\begin{array}{r} 263 \\ \times 38 \\ \hline \end{array}$$

2. 
$$\begin{array}{r} 412 \\ \times 89 \\ \hline \end{array}$$

3. 
$$\begin{array}{r} 428 \\ \times 67 \\ \hline \end{array}$$

4. 
$$\begin{array}{r} 203 \\ \times 136 \\ \hline \end{array}$$

5. 
$$\begin{array}{r} 435 \\ \times 91 \\ \hline \end{array}$$

6. 
$$\begin{array}{r} 499 \\ \times 218 \\ \hline \end{array}$$

7. 
$$\begin{array}{r} 1776 \\ \times 36 \\ \hline \end{array}$$

8. 
$$\begin{array}{r} 2236 \\ \times 87 \\ \hline \end{array}$$

Solve the following problems.

9. A train is going 58 miles an hour. If it keeps going at that speed for 24 hours, how far will it have traveled?

\_\_\_\_\_

10. A jet travels at 563 miles an hour. How far can it travel in 15 hours?

\_\_\_\_\_

11. A man makes \$437 a month. How much can he make in a year (12 months)?

\_\_\_\_\_

12. A factory makes 3,490 cars a day. How many cars can it make in 23 days?

\_\_\_\_\_

Round off the following numbers to the nearest thousand.

1. 4,793 \_\_\_\_\_
2. 17,924 \_\_\_\_\_
3. 2,362 \_\_\_\_\_
4. 67,245 \_\_\_\_\_

Round off the following decimals to the nearest hundredth.

5. .475981 \_\_\_\_\_
6. .9333333 \_\_\_\_\_
7. .749511 \_\_\_\_\_
8. .428932 \_\_\_\_\_

Round off the following decimals to the nearest thousandth.

9. .934789 \_\_\_\_\_
10. .666666 \_\_\_\_\_
11. .333333 \_\_\_\_\_
12. .472143 \_\_\_\_\_

Round off the following decimals to the nearest one.

13. 7.943721 \_\_\_\_\_
14. 2.389472 \_\_\_\_\_
15. Write 920,000,000,000 in words.  
\_\_\_\_\_  
\_\_\_\_\_

16. Write sixteen million in numbers.  
\_\_\_\_\_

17. Factor 24. \_\_\_\_\_

18.  $48205 \div 6 =$  \_\_\_\_\_

19. Find the average of 99 and 115.  
\_\_\_\_\_

Write the following numbers in words.

20. 4.07 \_\_\_\_\_
21. 1.011 \_\_\_\_\_

Write the following words in numbers.

22. five and one thousandth \_\_\_\_\_
23. seven and five tenths \_\_\_\_\_
24.  $42.8 + 3.975 =$  \_\_\_\_\_
25.  $5.93 + 85.003 =$  \_\_\_\_\_
26.  $35 + 8.73 =$  \_\_\_\_\_
27.  $9.3 - 4.154 =$  \_\_\_\_\_
28.  $13.7 - 1.148 =$  \_\_\_\_\_
29. Jo-Jo Beanstalk, the great basketball star, scored 35 points in one game, 83 points in another, 44 points in another, and 62 points in another. What was his average per game?  
\_\_\_\_\_

30. Cynthia got \$18.35 from her mother and \$13.50 from her grandmother, but then she lost \$14.00 on the bus. How much did she have left?  
\_\_\_\_\_

31. Mrs. Giles made \$1,233 in 9 weeks. How much did she make each week?  
\_\_\_\_\_

32. A jet goes 605 miles an hour. How far can it go in 7 hours?  
\_\_\_\_\_

Carefully work out the following problems. Use the multiplication steps you have learned.

1.

$$\begin{array}{r} 216 \\ \times 83 \\ \hline \end{array}$$

2.

$$\begin{array}{r} 625 \\ \times 74 \\ \hline \end{array}$$

3.

$$\begin{array}{r} 209 \\ \times 95 \\ \hline \end{array}$$

4.

$$\begin{array}{r} 386 \\ \times 381 \\ \hline \end{array}$$

5.

$$\begin{array}{r} 289 \\ \times 73 \\ \hline \end{array}$$

6.

$$\begin{array}{r} 330 \\ \times 446 \\ \hline \end{array}$$

7.

$$\begin{array}{r} 895 \\ \times 77 \\ \hline \end{array}$$

8.

$$\begin{array}{r} 362 \\ \times 90 \\ \hline \end{array}$$

Solve the following problems.

9. A woman makes \$135 a week working as a dancer. How much money can she make if she works for 48 weeks of the year?

---

10. At top speed, a racing car's engine turns around 6,500 times each minute. How many times does it turn around going top speed for 24 minutes?

---

11. A woman has \$3,500. She says she wants to have 15 times that much. How much money does she want to have?

---

12. In the middle of a race, a man's heart is beating 136 times a minute. How many times will it beat if he keeps running for 14 minutes?

---



Using the multiplication steps you have learned, carefully work out the following problems.

1. 
$$\begin{array}{r} 289 \\ \times 73 \\ \hline \end{array}$$

2. 
$$\begin{array}{r} 365 \\ \times 48 \\ \hline \end{array}$$

3. 
$$\begin{array}{r} 238 \\ \times 590 \\ \hline \end{array}$$

4. 
$$\begin{array}{r} 827 \\ \times 63 \\ \hline \end{array}$$

5. 
$$\begin{array}{r} 1267 \\ \times 76 \\ \hline \end{array}$$

6. 
$$\begin{array}{r} 2408 \\ \times 338 \\ \hline \end{array}$$

7. 
$$\begin{array}{r} 1642 \\ \times 36 \\ \hline \end{array}$$

8. 
$$\begin{array}{r} 6937 \\ \times 86 \\ \hline \end{array}$$

Now solve the following problems.

9. A man earns \$528 a month. How much does he make in a year (12 months)?  
\_\_\_\_\_
10. A family buys a car on the installment plan. They have to make 36 payments of \$125 each. How much will the car cost in all?  
\_\_\_\_\_
11. A car is going 73 miles an hour. At this speed, how far will it go in 24 hours?  
\_\_\_\_\_
12. A woman had 12 children. When she died she gave each child \$450. Altogether how much did she give her children?  
\_\_\_\_\_

Carefully work out all of the following problems.

1. 
$$\begin{array}{r} 342 \\ \times 35 \\ \hline \end{array}$$

2. 
$$\begin{array}{r} 491 \\ \times 84 \\ \hline \end{array}$$

3. 
$$\begin{array}{r} 607 \\ \times 26 \\ \hline \end{array}$$

4. 
$$\begin{array}{r} 948 \\ \times 479 \\ \hline \end{array}$$

5. 
$$\begin{array}{r} 647 \\ \times 29 \\ \hline \end{array}$$

6. 
$$\begin{array}{r} 1403 \\ \times 21 \\ \hline \end{array}$$

7. 
$$\begin{array}{r} 7947 \\ \times 206 \\ \hline \end{array}$$

8. 
$$\begin{array}{r} 4964 \\ \times 517 \\ \hline \end{array}$$

Solve the following problems.

9. A man buys a car and has to pay for it in 24 payments. Each payment is \$155. How much will the car cost him by the time he has made all the payments?

\_\_\_\_\_

10. A woman makes \$156 a week. How much will she make in 49 weeks?

\_\_\_\_\_

1. Find the interval, and then figure out what  $A$  is on the following number line.



2. Write 604,000,000 in words. \_\_\_\_\_

Write twenty-five trillion in numbers. \_\_\_\_\_

3. Factor 30 three ways. \_\_\_\_\_

4.  $66435 \div 8 =$  \_\_\_\_\_

5. Find the average of 35, 68, and 41. \_\_\_\_\_

6. Write 9.5 in words. \_\_\_\_\_

Write seven and four thousandths in decimals. \_\_\_\_\_

7.  $68.5 + 4.391 =$  \_\_\_\_\_

8.  $23.4 - 9.153 =$  \_\_\_\_\_

9. Round off 7,694,284 to the nearest million. \_\_\_\_\_

10. Round off .5428941 to the nearest hundredth. \_\_\_\_\_

To multiply decimals, follow the steps listed below.

- 1) Multiply normally.
- 2) Count how many numbers there are to the right of the decimal or decimals in the problem.
- 3) Count off that number of decimal places in the answer. Start from the right and move to the left.

Example:

$13.41$  There are a total of three numbers to the right of the decimals  
 $\times .2$  in the problem.  
**2.682** Answer has three decimal places.

Put the decimal in the correct place in each of the following answers.

Example:

$4.69$  There are a total of three numbers to the right of the decimals  
 $\times .5$  in the problem, so there are three decimal places  
**2.345** in the answer.

1. 
$$\begin{array}{r} 21.4 \\ \times .6 \\ \hline 1284 \end{array}$$

2. 
$$\begin{array}{r} 365 \\ \times .9 \\ \hline 3285 \end{array}$$

3. 
$$\begin{array}{r} .369 \\ \times 6 \\ \hline 2214 \end{array}$$

4. 
$$\begin{array}{r} .284 \\ \times .8 \\ \hline 2272 \end{array}$$

Work out the following problems. Use the steps listed at the top of this page. Be sure to put the decimal in the correct place in each answer.

5. 
$$\begin{array}{r} 74.2 \\ \times .6 \\ \hline \end{array}$$

6. 
$$\begin{array}{r} .223 \\ \times .6 \\ \hline \end{array}$$

7. 
$$\begin{array}{r} 4.29 \\ \times 3 \\ \hline \end{array}$$

8. 
$$\begin{array}{r} 2.05 \\ \times .4 \\ \hline \end{array}$$

9. 
$$\begin{array}{r} .316 \\ \times 6 \\ \hline \end{array}$$

10. 
$$\begin{array}{r} 362 \\ \times .4 \\ \hline \end{array}$$

11. 
$$\begin{array}{r} 9.38 \\ \times 2 \\ \hline \end{array}$$

12. 
$$\begin{array}{r} .643 \\ \times .6 \\ \hline \end{array}$$

13. 
$$\begin{array}{r} 83.1 \\ \times .9 \\ \hline \end{array}$$

14. 
$$\begin{array}{r} 207 \\ \times .4 \\ \hline \end{array}$$

Do the next two problems.

15. A man makes \$4.35 an hour. How much can he make working an 8-hour day?

\_\_\_\_\_

16. A man sends out 7 letters. Each one weighs 1.43 ounces. How much do the letters weigh all together?

\_\_\_\_\_

## Multiplication of Decimals 2

20

Remember the steps to follow to multiply decimals. If at step three you don't have enough numbers in your answer, add as many zeroes as you need. Add the zeroes to the left of the last number when you count from right to left.

Example:

$$\begin{array}{r} .415 \\ \times .2 \\ \hline 830 \end{array}$$

Four decimal places  
are needed.

$$\begin{array}{r} .415 \\ \times .2 \\ \hline .0830 \end{array}$$

Answer adds a zero to make  
four decimal places.

Put decimals in the correct places in the following answers. Add zeroes where they are needed.

1.  $\begin{array}{r} .137 \\ \times .2 \\ \hline 274 \end{array}$

2.  $\begin{array}{r} .1286 \\ \times .3 \\ \hline 3858 \end{array}$

3.  $\begin{array}{r} .214 \\ \times .4 \\ \hline 856 \end{array}$

4.  $\begin{array}{r} .135 \\ \times .03 \\ \hline 405 \end{array}$

5.  $\begin{array}{r} .146 \\ \times .004 \\ \hline 584 \end{array}$

Now work out the following problems. Add zeroes where they are needed.

6.  $\begin{array}{r} .273 \\ \times .5 \\ \hline \end{array}$

7.  $\begin{array}{r} 6.29 \\ \times 3 \\ \hline \end{array}$

8.  $\begin{array}{r} .428 \\ \times .6 \\ \hline \end{array}$

9.  $\begin{array}{r} 6.27 \\ \times .9 \\ \hline \end{array}$

10.  $\begin{array}{r} .268 \\ \times .3 \\ \hline \end{array}$

11.  $\begin{array}{r} .174 \\ \times .03 \\ \hline \end{array}$

12.  $\begin{array}{r} 71.3 \\ \times .6 \\ \hline \end{array}$

13.  $\begin{array}{r} .268 \\ \times .05 \\ \hline \end{array}$

14.  $\begin{array}{r} 489 \\ \times .4 \\ \hline \end{array}$

15.  $\begin{array}{r} .613 \\ \times .02 \\ \hline \end{array}$

16.  $\begin{array}{r} 2.43 \\ \times .45 \\ \hline \end{array}$

17.  $\begin{array}{r} 8.62 \\ \times 3.2 \\ \hline \end{array}$

18.  $\begin{array}{r} .6438 \\ \times .29 \\ \hline \end{array}$

Solve the next two problems.

19. A woman makes \$3.25 an hour. How much will she make if she works for 9 hours?

\_\_\_\_\_

20. A box of cereal weighs 12.6 ounces. How much do 15 boxes weigh?

\_\_\_\_\_

- $437 \times 93 =$  \_\_\_\_\_
- $358 \times 39 =$  \_\_\_\_\_
- $47 \times 6019 =$  \_\_\_\_\_
- $632 \times 6937 =$  \_\_\_\_\_

Find the interval, and then figure out what *A* is on the following number line.



A = \_\_\_\_\_

- Write nine hundred forty-seven thousand in numbers.  
\_\_\_\_\_
- Factors of 63 = \_\_\_\_\_
- $56505 \div 8 =$  \_\_\_\_\_
- Find the average of 101, 94, 85, 26, and 74.  
\_\_\_\_\_
- Write 7.004 in words.  
\_\_\_\_\_  
\_\_\_\_\_
- Write two and fourteen hundredths in numbers.  
\_\_\_\_\_
- $69 + 2.337 + 903 =$  \_\_\_\_\_
- $79.4 - 23.159 =$  \_\_\_\_\_

Round off the following numbers to the nearest million.

- 62,479,393 \_\_\_\_\_
- 28,547,219 \_\_\_\_\_
- 62,188,937 \_\_\_\_\_
- 207,235,729 \_\_\_\_\_

Round off the following to the nearest hundredth.

- .473593 \_\_\_\_\_
- .775934 \_\_\_\_\_
- 1.987321 \_\_\_\_\_
- 9.74298 \_\_\_\_\_
- Marlene's heart beats 75 times a minute while she is sitting down. How many times does it beat in an hour? (An hour has 60 minutes in it.)  
\_\_\_\_\_
- Mrs. Fischer takes her 3 children to a museum. Her ticket costs \$3.50, and each child's ticket costs \$1.25. What is the total amount the family pays to get in to the museum?  
\_\_\_\_\_
- How many pennies can you get for 193 quarters?  
\_\_\_\_\_
- Mr. Barry's new sports car can go 162 miles on 9 gallons of gasoline. How many miles does his car get to each gallon?  
\_\_\_\_\_
- A store bought 32 calculators for \$34 each. How much did all the calculators cost the store?  
\_\_\_\_\_

## Multiplication of Decimals 3

16

Carefully work out the following problems. Be sure to put the decimal in the correct place in each answer. Add zeroes if you need to.

$$\begin{array}{r} 1. \quad 6.04 \\ \times .8 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 225 \\ \times .7 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad .641 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 293 \\ \times .007 \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad .2451 \\ \times .63 \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad .235 \\ \times .4 \\ \hline \end{array}$$

$$\begin{array}{r} 7. \quad .667 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 8. \quad 93.1 \\ \times .8 \\ \hline \end{array}$$

$$\begin{array}{r} 9. \quad 67.42 \\ \times 8.9 \\ \hline \end{array}$$

$$\begin{array}{r} 10. \quad 2907 \\ \times .46 \\ \hline \end{array}$$

$$\begin{array}{r} 11. \quad 69.1 \\ \times .6 \\ \hline \end{array}$$

$$\begin{array}{r} 12. \quad .297 \\ \times .03 \\ \hline \end{array}$$

$$\begin{array}{r} 13. \quad .637 \\ \times .04 \\ \hline \end{array}$$

Solve the following problems.

14. A candy bar costs \$.06 (6 cents). How much will it cost to buy a year's supply (365 candy bars)?

\_\_\_\_\_

15. A game costs \$4.95. How much would 7 of them cost?

\_\_\_\_\_

16. A man makes \$10.25 an hour as a bricklayer. How much does he make working an 8-hour day?

\_\_\_\_\_

## Multiplication of Decimals 4

17

Carefully work out the following problems. Be sure to put the decimal in the correct place in each answer. Add zeroes if you need to.

$$\begin{array}{r} 1. \quad 62.1 \\ \times .5 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad .283 \\ \times .3 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 4.93 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 3.72 \\ \times .9 \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad 3074 \\ \times .025 \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 9.73 \\ \times .4 \\ \hline \end{array}$$

$$\begin{array}{r} 7. \quad 692 \\ \times .8 \\ \hline \end{array}$$

$$\begin{array}{r} 8. \quad .407 \\ \times .8 \\ \hline \end{array}$$

$$\begin{array}{r} 9. \quad 14.38 \\ \times .69 \\ \hline \end{array}$$

$$\begin{array}{r} 10. \quad .4695 \\ \times .24 \\ \hline \end{array}$$

$$\begin{array}{r} 11. \quad .604 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 12. \quad .375 \\ \times .02 \\ \hline \end{array}$$

$$\begin{array}{r} 13. \quad .491 \\ \times .04 \\ \hline \end{array}$$

Solve the following problems.

14. A lawyer charges \$35.55 an hour. How much will it cost to hire her for 3 hours?

\_\_\_\_\_

15. A postcard costs \$.08 (8 cents). How much will it cost to buy 143 postcards?

\_\_\_\_\_

16. A woman bought the same lunch at McDonald's every day, and it cost her \$1.35. How much did her lunches cost for a 5-day week?

\_\_\_\_\_

17. A book weighs 13.7 ounces. How much do 12 copies of the book weigh?

\_\_\_\_\_



Solve the following problems. Be sure to put the decimal in the correct place in each answer. Add zeroes if you need to.

$$\begin{array}{r} 1. \quad 69.4 \\ \times .5 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 2.37 \\ \times .4 \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad .683 \\ \times 17 \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 23.1 \\ \times .6 \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad .146 \\ \times .5 \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 236 \\ \times .9 \\ \hline \end{array}$$

$$\begin{array}{r} 7. \quad .1472 \\ \times .02 \\ \hline \end{array}$$

$$\begin{array}{r} 8. \quad 69.47 \\ \times 3.5 \\ \hline \end{array}$$

Solve the following problems.

9. An iron-worker makes \$12.56 an hour. How much does he make working an 8-hour day?

\_\_\_\_\_

10. A candy bar costs \$.07 (7 cents). How much would it cost to buy 255 candy bars for a party?

\_\_\_\_\_

1. Find the interval, and then figure out what  $A$  is on the following number line.



2. Write 83,000 in words. \_\_\_\_\_  
 Write seven hundred twelve million in numbers. \_\_\_\_\_
3. Factor 90 three ways. \_\_\_\_\_
4.  $42367 \div 7 =$  \_\_\_\_\_
5. Find the average of 85, 96, 74, 103, and 62. \_\_\_\_\_
6. Write 7.06 in words. \_\_\_\_\_  
 Write eight and eleven thousandths in decimals. \_\_\_\_\_
7.  $48 + 29.3 + 2.621 =$  \_\_\_\_\_
8.  $89.4 - 21.372 =$  \_\_\_\_\_
9. Round off 68,398 to the nearest thousand. \_\_\_\_\_
10. Round off 68.57894 to the nearest one. \_\_\_\_\_
11.  $793 \times .46 =$  \_\_\_\_\_

The ancient Romans had a completely different number system from the one we use. *Roman numerals* are not used very much now. You sometimes see them on record covers, movie titles, and library walls. They can be fun to learn, rather like a secret code.

Here are the basic symbols that make up the numerals in the Roman system.

I = 1

V = 5

X = 10

L = 50

C = 100

D = 500

M = 1000

Many other numbers are written by arranging Roman symbols from the highest value to the lowest, left to right, and then adding. When you do this you must remember *Rule 1: Never use the same symbol more than three times in a row.*

Examples:

XI = 11 (10 + 1)

XXII = 22 (10 + 10 + 1 + 1)

LXVIII = 68 (50 + 10 + 5 + 1 + 1 + 1)

MMCXXXV = 2,135 (1000 + 1000 + 100 + 10 + 10 + 10 + 5)

Write the following Roman numerals in our system of numbers. (Ours are called *Arabic numbers*.)

1. XIII \_\_\_\_\_
2. LXX \_\_\_\_\_
3. III \_\_\_\_\_
4. VI \_\_\_\_\_
5. VIII \_\_\_\_\_
6. XV \_\_\_\_\_
7. XXXI \_\_\_\_\_
8. LXII \_\_\_\_\_
9. LXXX \_\_\_\_\_
10. CC \_\_\_\_\_
11. CXXX \_\_\_\_\_
12. DCC \_\_\_\_\_
13. CCXXVI \_\_\_\_\_

Now write the following Arabic numbers in Roman numerals.

14. 12 \_\_\_\_\_
15. 25 \_\_\_\_\_
16. 33 \_\_\_\_\_
17. 26 \_\_\_\_\_
18. 38 \_\_\_\_\_
19. 63 \_\_\_\_\_
20. 120 \_\_\_\_\_
21. 232 \_\_\_\_\_
22. 358 \_\_\_\_\_
23. 523 \_\_\_\_\_
24. 700 \_\_\_\_\_
25. 835 \_\_\_\_\_
26. 888 \_\_\_\_\_

Here again are the basic symbols that make up the numerals in the Roman system.

$I = 1$

$L = 50$

$D = 500$

$V = 5$

$C = 100$

$M = 1000$

$X = 10$

Remember that other numbers are written by arranging Roman symbols from the highest value to the lowest, left to right, and then adding. Remember *Rule 1: Never use the same symbol more than three times in a row.*

Write the following Roman numerals in our system of numbers. (Arabic numbers).

1. XXXVI \_\_\_\_\_

5. DCCC \_\_\_\_\_

2. LXVII \_\_\_\_\_

6. DCLV \_\_\_\_\_

3. CCXV \_\_\_\_\_

7. MCCXXII \_\_\_\_\_

4. CCCXXI \_\_\_\_\_

8. MMMCCCXXVIII \_\_\_\_\_

Write the following Arabic numbers in Roman numerals.

9. 15 \_\_\_\_\_

16. 223 \_\_\_\_\_

10. 23 \_\_\_\_\_

17. 520 \_\_\_\_\_

11. 56 \_\_\_\_\_

18. 650 \_\_\_\_\_

12. 58 \_\_\_\_\_

19. 821 \_\_\_\_\_

13. 63 \_\_\_\_\_

20. 1,200 \_\_\_\_\_

14. 86 \_\_\_\_\_

21. 3,500 \_\_\_\_\_

15. 125 \_\_\_\_\_

When a symbol for a smaller value appears in front of a larger one, subtract the symbol on the left from the one on its right. *Only certain symbols may be used to subtract. These are I, X, and C.*

Examples:

$IV = 4 (5 - 1)$  not IIII (Remember Rule 1.)

$IX = 9 (10 - 1)$

$XL = 40 (50 - 10)$

$CM = 900 (1000 - 100)$

$95 = XCV$  not VC (only I, X, C may be used to subtract.)

When you write Roman numerals where you must subtract the one on the left from the one on the right, you must remember *Rule 2: Subtract one symbol from the next highest symbol.*

Example:

$490 = CDXC (500 - 100) + (100 - 10)$

not

XD which breaks Rule 2.

---

Here is a longer list of Roman numerals.

I = 1  
II = 2  
III = 3  
IV = 4

V = 5  
VI = 6  
VII = 7  
VIII = 8

IX = 9  
X = 10  
XI = 11  
XII = 12

XIII = 13  
XIV = 14  
XV = 15  
XVI = 16

XVII = 17  
XVIII = 18  
XIX = 19  
XX = 20

**Write the following Roman numerals in our numbers.**

22. XLV \_\_\_\_\_

23. XXIX \_\_\_\_\_

24. XC \_\_\_\_\_

25. CD \_\_\_\_\_

**Write the following numbers as Roman numerals.**

26. 432 \_\_\_\_\_

27. 45 \_\_\_\_\_

28. 903 \_\_\_\_\_

29. 54 \_\_\_\_\_

30. 39 \_\_\_\_\_

1.  $8.35 \times 2.3 =$  \_\_\_\_\_

2.  $30.9 \times 634 =$  \_\_\_\_\_

3.  $238 \times .64 =$  \_\_\_\_\_

4. A woman makes \$7.55 an hour. How much can she make working for 9 hours?

\_\_\_\_\_

5. The gas tank in Mr. Hamhock's car was empty. He filled it with gasoline that cost \$1.36 a gallon. If the tank holds 15 gallons, how much did the fill-up cost?

\_\_\_\_\_

6. A train goes 876 miles in 6 hours. How fast is the train going?

\_\_\_\_\_

7. If 3 cans of tonic cost 33 cents (\$.33), how much will five cans cost?

\_\_\_\_\_

Find the interval, and then figure out what *A* is in the following number line.



A = \_\_\_\_\_

9. Write 12,000,000 in words.

\_\_\_\_\_

10. Write seven hundred forty billion in numbers.

\_\_\_\_\_

11. Factors of 90 = \_\_\_\_\_

\_\_\_\_\_

12.  $21664 \div 9 =$  \_\_\_\_\_

13. Find the average of 19, 23, 18, 14, and 6.

\_\_\_\_\_

14. Write 6.9 in words.

\_\_\_\_\_

15. Write fourteen and twelve hundredths in numbers.

\_\_\_\_\_

16.  $69.47 + 24 + 1.993 =$  \_\_\_\_\_

17.  $38.4 - 19.375 =$  \_\_\_\_\_

Round off the following numbers to the nearest million.

18. 42,674,214 \_\_\_\_\_

19. 607,218,999 \_\_\_\_\_

Round off the following decimal fractions to the nearest tenth.

20. .7734 \_\_\_\_\_

21. .9173 \_\_\_\_\_

Round off the following numbers to the nearest one.

22. 44.63321 \_\_\_\_\_

23. 501.19975 \_\_\_\_\_

24. 459.72231 \_\_\_\_\_

Remember:

*Rule 1: Never use the same symbol more than three times in a row;*

*Rule 2: Subtract one symbol from the next highest symbol.*

Write the following Roman numerals in Arabic numbers (our numbers). An asterisk ( \* ) means that you must use subtraction to figure out the answer.

1. I \_\_\_\_\_
2. V \_\_\_\_\_
3. X \_\_\_\_\_
4. L \_\_\_\_\_
5. C \_\_\_\_\_
6. D \_\_\_\_\_
7. M \_\_\_\_\_
8. XXVII \_\_\_\_\_
9. LXVIII \_\_\_\_\_
10. LXXX \_\_\_\_\_
11. CXI \_\_\_\_\_
12. DCCCXV \_\_\_\_\_
13. DCI \_\_\_\_\_
14. CD\* \_\_\_\_\_
15. CM\* \_\_\_\_\_
16. CCXXIX\* \_\_\_\_\_
17. MMDCCXIII \_\_\_\_\_
18. MCDXXII\* \_\_\_\_\_
19. LXXIV\* \_\_\_\_\_
20. CMLXIX\* \_\_\_\_\_
21. MMMDCCCLXXXVIII \_\_\_\_\_

Write the following numbers in Roman numerals. An asterisk ( \* ) means that you must use subtraction by putting a smaller letter in front of a bigger one.

22. 27 \_\_\_\_\_
23. 83 \_\_\_\_\_
24. 90\* \_\_\_\_\_
25. 43\* \_\_\_\_\_
26. 44\* \_\_\_\_\_
27. 49\* \_\_\_\_\_
28. 61 \_\_\_\_\_
29. 128 \_\_\_\_\_
30. 248\* \_\_\_\_\_
31. 401\* \_\_\_\_\_
32. 557 \_\_\_\_\_
33. 724\* \_\_\_\_\_
34. 1,328 \_\_\_\_\_
35. 3,215 \_\_\_\_\_

Answer the following questions using Arabic numbers.

36. At the end of a film, its date was stated as MCMXXXVIII. What year would that be?  
\_\_\_\_\_
37. The title page of a book says the book was published in MDCCCLIV. What year was that?  
\_\_\_\_\_
38. Printed on the back of a record album is the date MCMLXVIII. In what year was the album put out?  
\_\_\_\_\_

Remember:

*Rule 1: Never use the same symbol more than three times in a row;*

*Rule 2: Subtract one symbol from the next highest symbol.*

Write the following Roman numerals in Arabic numbers (our numbers). An asterisk ( \* ) means that you must use subtraction to figure out the answer.

1. I \_\_\_\_\_
2. V \_\_\_\_\_
3. X \_\_\_\_\_
4. L \_\_\_\_\_
5. C \_\_\_\_\_
6. D \_\_\_\_\_
7. M \_\_\_\_\_
8. XXI \_\_\_\_\_
9. XLIII\* \_\_\_\_\_
10. XXIX\* \_\_\_\_\_
11. LXXVI \_\_\_\_\_
12. LXXXIV\* \_\_\_\_\_
13. CCXIII \_\_\_\_\_
14. CCCXXVII \_\_\_\_\_
15. DCCXX \_\_\_\_\_
16. CDLXXVI\* \_\_\_\_\_
17. DCCCI \_\_\_\_\_
18. MDCCXXVIII \_\_\_\_\_
19. MMMCXXIII \_\_\_\_\_
20. CMXLIII\* \_\_\_\_\_
21. CMXCIV\* \_\_\_\_\_

Write the following Arabic numbers in Roman numerals. An asterisk ( \* ) means that you must use subtraction by putting a smaller letter in front of a bigger one.

22. 35 \_\_\_\_\_
23. 83 \_\_\_\_\_
24. 51 \_\_\_\_\_
25. 45\* \_\_\_\_\_
26. 88 \_\_\_\_\_
27. 189\* \_\_\_\_\_
28. 134\* \_\_\_\_\_
29. 555 \_\_\_\_\_
30. 389\* \_\_\_\_\_
31. 637 \_\_\_\_\_
32. 874\* \_\_\_\_\_
33. 1,231 \_\_\_\_\_
34. 1,573 \_\_\_\_\_
35. 1,840\* \_\_\_\_\_
36. 3,429\* \_\_\_\_\_

Answer the next two questions using Arabic numbers.

37. A Roman grave has two dates, CLXIII-CCXLI, carved on its tombstone. When was the buried person born, and when did he or she die?

\_\_\_\_\_

38. Carved on the wall of a public library are the letters MDCCCXXXII. These tell when the library was built. In what year was it built?

\_\_\_\_\_



**Write the following Roman numerals in Arabic numbers (our numbers).**

1. XXVI \_\_\_\_\_
2. LXIII \_\_\_\_\_
3. XLVIII \_\_\_\_\_
4. CXVII \_\_\_\_\_
5. XC \_\_\_\_\_
6. CCCLXIII \_\_\_\_\_
7. CDXXVI \_\_\_\_\_
8. CMXXIV \_\_\_\_\_
9. MMCCCXV \_\_\_\_\_
10. MCMXXIX \_\_\_\_\_
11. MMMDCCLXXXVIII \_\_\_\_\_

**Write the following Arabic numbers in Roman numerals.**

12. 37 \_\_\_\_\_
13. 41 \_\_\_\_\_
14. 83 \_\_\_\_\_
15. 125 \_\_\_\_\_
16. 248 \_\_\_\_\_
17. 329 \_\_\_\_\_
18. 501 \_\_\_\_\_
19. 733 \_\_\_\_\_
20. 1,738 \_\_\_\_\_
21. 3,949 \_\_\_\_\_
22. 2,515 \_\_\_\_\_

**Solve the following problems.**

23. At the end of a film, the date when it was made was stated as MCMXXIII. What year would this be? Answer in Arabic numbers.

\_\_\_\_\_

24. An old book shows the publication date in the Roman numerals MDCCXIX. When was the book made? Answer in Arabic numbers.

\_\_\_\_\_

25. Write the present year in Roman numerals.

\_\_\_\_\_

1. Find the interval, and then figure out what  $A$  is on the following number line.



2. Write 20,000,000,000,000 in words. \_\_\_\_\_

Write six hundred eighty-five million in numbers. \_\_\_\_\_

3. Factor 60 three ways. \_\_\_\_\_

4.  $41658 \div 8 =$  \_\_\_\_\_

5. Find the average of 356, 294, and 400. \_\_\_\_\_

6. Write 7.15 in words. \_\_\_\_\_

Write nine and six thousandths in decimals. \_\_\_\_\_

7.  $350.8 + 91.65 + 31 =$  \_\_\_\_\_

8.  $26.5 - 3.416 =$  \_\_\_\_\_

9. Round off 79,346,299 to the nearest million. \_\_\_\_\_

10. Round off .6438691 to the nearest thousandth. \_\_\_\_\_

11.  $620.7 \times .56 =$  \_\_\_\_\_

In all of the following problems the divisor is 23. Work out the times table for 23 first; then do the division. Follow the same four steps you use in one-number division (divide, multiply, subtract, bring down). There will not be any remainders in these problems.

$23 \times 1 = \underline{23}$

Example:

$23 \times 2 = \underline{46}$

$$\begin{array}{r}
 594 \\
 23 \overline{) 13662} \\
 \underline{115} \quad \downarrow \downarrow \\
 216 \\
 \underline{207} \quad \downarrow \\
 92 \\
 \underline{92} \\
 0
 \end{array}$$

$23 \times 3 = \underline{69}$

1.  $23 \overline{) 8326}$

$23 \times 4 = \underline{92}$

$23 \times 5 = \underline{\quad}$

$23 \times 6 = \underline{\quad}$

$23 \times 7 = \underline{\quad}$

$23 \times 8 = \underline{\quad}$

2.  $23 \overline{) 16514}$

3.  $23 \overline{) 13915}$

$23 \times 9 = \underline{\quad}$

Use two-number division to do the following problems.

4. A boat took 23 hours to make a trip of 805 miles. How far did the boat travel each hour?

\_\_\_\_\_

5. A man made \$15,732 in 23 months of work. How much did he make each month?

\_\_\_\_\_

6. A teacher bought 1,495 bags of potato chips. If he split them up evenly among the 23 students in his class, how many bags would each student get?

\_\_\_\_\_

First work out the times table chart for 47; then do the division. There will not be any remainders in these problems.

$47 \times 1 = \underline{\hspace{2cm}}$

$47 \times 2 = \underline{\hspace{2cm}}$

$47 \times 3 = \underline{\hspace{2cm}}$

$47 \times 4 = \underline{\hspace{2cm}}$

$47 \times 5 = \underline{\hspace{2cm}}$

$47 \times 6 = \underline{\hspace{2cm}}$

$47 \times 7 = \underline{\hspace{2cm}}$

$47 \times 8 = \underline{\hspace{2cm}}$

$47 \times 9 = \underline{\hspace{2cm}}$

1. 
$$47 \overline{) 31584}$$

2. 
$$47 \overline{) 16873}$$

3. 
$$47 \overline{) 37788}$$

4. 
$$47 \overline{) 7849}$$

5. 
$$47 \overline{) 101708}$$

Use two-number division to do the following word problems.

6. During a race, a woman's heart beats 6,298 times in 47 minutes. How many times does her heart beat each minute?

\_\_\_\_\_

7. A man worked 47 weeks of the year and made \$11,656. How much did he make each week?

\_\_\_\_\_

Write the following Roman numerals in Arabic numbers (our numbers).

1. DCCCLXVII \_\_\_\_\_
2. MMDCXLII \_\_\_\_\_
3. CMXXIV \_\_\_\_\_
4. MMCDLXXXIX \_\_\_\_\_
5. MMDCCXLVIII \_\_\_\_\_

Write the following Arabic numbers in Roman numerals.

6. 2,334 \_\_\_\_\_
7. 1,927 \_\_\_\_\_
8. 1,671 \_\_\_\_\_
9. 3,425 \_\_\_\_\_
10. 3,888 \_\_\_\_\_

Find the interval, and then figure out what A is on the following number line.



A = \_\_\_\_\_

12. Write 77,000,000 in words.  
\_\_\_\_\_
13. Write nine hundred trillion in numbers.  
\_\_\_\_\_
14. Factors of 77 = \_\_\_\_\_
15.  $54222 \div 9 =$  \_\_\_\_\_
16. Find the average of 73, 18, and 41.  
\_\_\_\_\_
17. Write 9.07 in words.  
\_\_\_\_\_  
\_\_\_\_\_

18. Write seventeen and twelve thousandths in decimals.  
\_\_\_\_\_

19.  $77.9 + 2.037 =$  \_\_\_\_\_
20.  $39.5 - 16.432 =$  \_\_\_\_\_
21. Round off 78,498 to the nearest thousand.  
\_\_\_\_\_

Round off the following to the nearest hundredth.

22. .47938 \_\_\_\_\_
23. .54301 \_\_\_\_\_

Round off the following to the nearest one.

24. 79.64 \_\_\_\_\_
25. 26.499 \_\_\_\_\_
26.  $83.5 \times .19$  \_\_\_\_\_
27.  $742 \times 1.57 =$  \_\_\_\_\_

28. Mr. Hogg walks into a restaurant and orders a bowl of clam chowder (\$1.35), a shrimp cocktail (\$2.25), a large medium-rare steak (\$7.50), a side order of onion rings (\$1.00), a plate of broccoli (\$1.25), two glasses of beer (\$ .95 each), and a hot fudge sundae (\$2.25). What is his bill without the tip?  
\_\_\_\_\_
29. A Roman gravestone says that the person buried under it lived from the year CCCXLVII to the year CDXXXVIII. How long did the person live? Answer in Arabic numbers.  
\_\_\_\_\_
30. A tire dealer charged Mrs. Lenn \$240 for a set of 5 new tires. How much did each tire cost?  
\_\_\_\_\_

Make a times table for 56 if you need to. Then do the following division problems.

$56 \times 1 = \underline{\quad}$

$56 \times 2 = \underline{\quad}$

$56 \times 3 = \underline{\quad}$

$56 \times 4 = \underline{\quad}$

$56 \times 5 = \underline{\quad}$

$56 \times 6 = \underline{\quad}$

$56 \times 7 = \underline{\quad}$

$56 \times 8 = \underline{\quad}$

$56 \times 9 = \underline{\quad}$

1.  $56 \overline{) 27552}$

2.  $56 \overline{) 39480}$

3.  $56 \overline{) 3528}$

Make a times table for 39 if you need to. Then do the following division problems.

$39 \times 1 = \underline{\quad}$

$39 \times 2 = \underline{\quad}$

4.  $39 \overline{) 33228}$

5.  $39 \overline{) 5694}$

6.  $39 \overline{) 37557}$

Use two-number division to solve the next two problems.

7. A man saved the same amount of money each year. After 56 years he had \$14,840. How much did he save each year?

\_\_\_\_\_

8. There are 52 weeks in a year. A woman made \$12,168 last year. How much did she make each week?

\_\_\_\_\_

Make a times table for 36 if you need to. Then do the following division problems.

1.  $36 \overline{) 23220}$

2.  $36 \overline{) 33732}$

3.  $36 \overline{) 28908}$

Make a times table for 52 if you need to. Then do the following division problems.

4.  $52 \overline{) 9672}$

5.  $52 \overline{) 35568}$

6.  $52 \overline{) 39312}$

Do the next two division problems.

7. A man bought a car and paid for it in 36 monthly payments. In all, the payments added up to \$3,708. How much was each payment?

\_\_\_\_\_

8. A car traveled 205,920 feet in 39 minutes. How many feet did it go each minute?

\_\_\_\_\_

Do you know how many miles this is?

\_\_\_\_\_

Solve the following division problems. There will be no remainders in these problems.

1.  $48 \overline{)35280}$

2.  $48 \overline{)28992}$

3.  $82 \overline{)13694}$

4.  $82 \overline{)380398}$

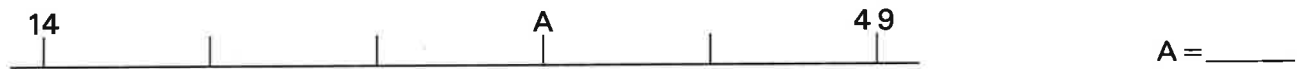
Solve the following word problem.

5. A cross-country train went at an average speed of 82 miles an hour and covered 1,230 miles. How long did it take the train to go that far?

---



1. Find the interval, and then figure out what  $A$  is on the following number line.



2. Write 902,000,000,000 in words. \_\_\_\_\_

Write fifty-three million in numbers. \_\_\_\_\_

3. Factor 55. \_\_\_\_\_

4.  $42189 \div 7 =$  \_\_\_\_\_

5. Find the average of 60, 89, 54, 22, and 30. \_\_\_\_\_

6. Write 4.3 in words. \_\_\_\_\_

Write nine and fifteen thousandths in decimals. \_\_\_\_\_

7.  $49.5 + 3.862 + 31 =$  \_\_\_\_\_

8.  $28.6 - 14.428 =$  \_\_\_\_\_

9. Round off 34,728,291 to the nearest million. \_\_\_\_\_

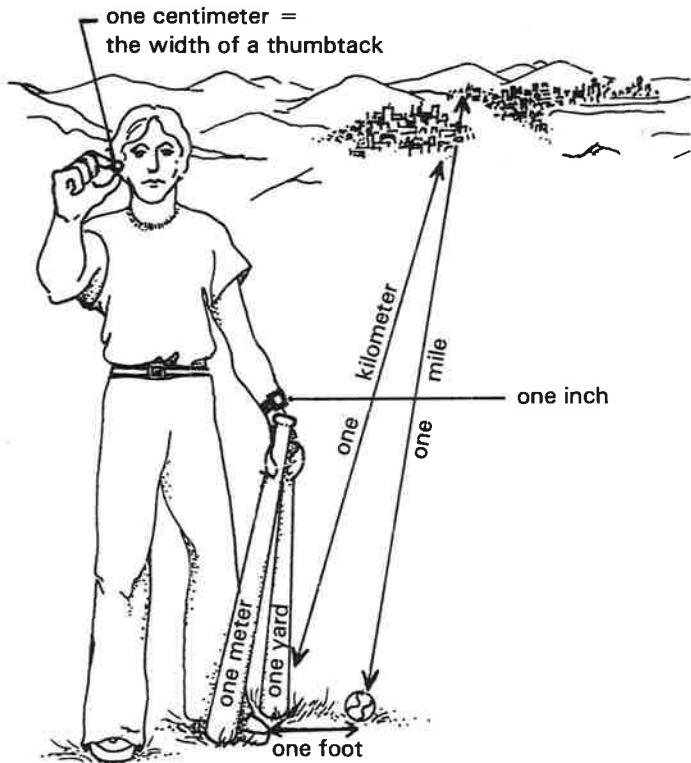
10. Round off .6439417 to the nearest tenth. \_\_\_\_\_

11.  $20.9 \times .47 =$  \_\_\_\_\_

12. Write MMDCCCLXII in Arabic numbers. \_\_\_\_\_

Write 3,428 in Roman numerals. \_\_\_\_\_

one millimeter = the width of this line ■



**DISTANCE**

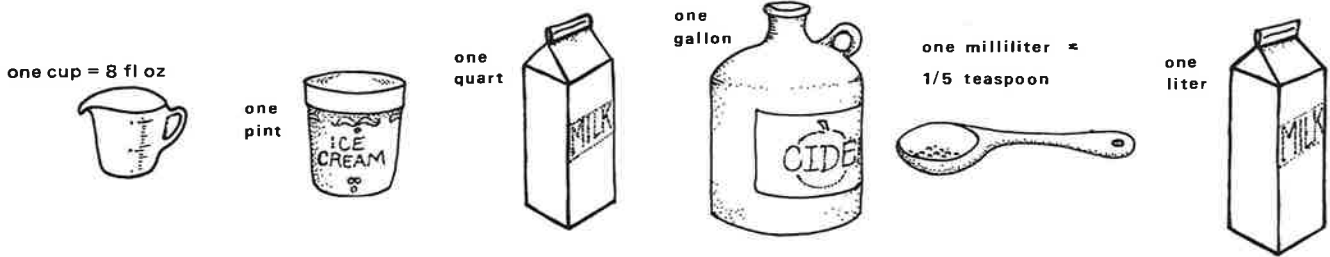
Unit	English		Metric	
	Abbreviation	Unit	Abbreviation	Unit
inch	in	millimeter	mm	
foot	ft	centimeter	cm	
yard	yd	meter	m	
mile	mi	kilometer	km	

Choose the best measure for each item below. Circle your choices in the English system and then in the metric system.

	English			Metric		
1. Length of a new pencil.	in	ft	mi	cm	m	km
2. Distance from the earth to the moon.	ft	yd	mi	mm	m	km
3. Length of a book.	in	ft	yd	cm	m	km
4. Length of your shoe.	in	yd	mi	mm	cm	m
5. Length of your desk.	in	ft	mi	cm	m	km
6. Length of a fingernail.	in	yd	mi	mm	m	km
7. Length of a key.	2 in	2 ft	2 mi	50 mm	50 cm	50 m
8. Length of a baseball bat.	3 in	3 ft	3 yd	1 cm	1 m	1 km
9. Distance from New York to Chicago.	1000 ft		1000 mi	1600 cm		1600 km
10. Length of a paper clip.	1 in	1 ft	1 yd	2 mm	2 cm	2 m
11. Length of a football field.	100 in		100 yd	90 cm		90 m
12. Length of your dictionary.	10 in	10 ft	10 yd	25 mm	25 cm	25m

**VOLUME (Liquids)**

English		Metric	
Unit	Abbreviations	Unit	Abbreviations
fluidounce	fl oz	milliliter	ml
cup	cup	liter	l
pint	pt		
quart	qt		
gallon	gal		



Choose the best measure for each item below. Circle your choices in the English system and then in the metric system.

	English			Metric	
1. Volume of water in a bathtub.	cup	pt	gal	ml	l
2. Volume of coffee in a coffee cup.	oz	cup	gal	ml	l
3. Volume of gas in a gas tank.	pt	qt	gal	ml	l
4. Volume of water in a raindrop.	oz	pt	qt	ml	l
5. Volume of water in an ocean.	oz	qt	gal	ml	l
6. Volume of a spoon.	1 oz	1 cup		6 ml	6 l
7. Volume of soda in a soda bottle.	16 oz	16 gal		500 ml	500 l
8. Volume of water in a fish tank.	20 cups	20 gals		80 ml	80 l
9. Volume of water in a drinking glass.	8 oz	8 qt		240 ml	240 l

On the chart to the right, fill in the best measures for each item below. Use the English system and the metric system.

	English	Metric
10. Volume of milk in a cat's dish.	_____	_____
11. Volume of water in a river.	_____	_____
12. Volume of chicken noodle soup in a can.	_____	_____
13. Length of a highway.	_____	_____
14. Volume of liquid in a test tube.	_____	_____
15. Volume of water in a wading pool.	_____	_____
16. Length of your classroom.	_____	_____
17. Volume of orange juice in an orange.	_____	_____

**Work out a times table chart for 53 and use it to solve the following division problems.**

$53 \times 1 = \underline{\hspace{2cm}}$

$53 \times 2 = \underline{\hspace{2cm}}$

$53 \times 3 = \underline{\hspace{2cm}}$

$53 \times 4 = \underline{\hspace{2cm}}$

$53 \times 5 = \underline{\hspace{2cm}}$

$53 \times 6 = \underline{\hspace{2cm}}$

$53 \times 7 = \underline{\hspace{2cm}}$

$53 \times 8 = \underline{\hspace{2cm}}$

$53 \times 9 = \underline{\hspace{2cm}}$

1.  $19716 \div 53 = \underline{\hspace{2cm}}$

2.  $43248 \div 53 = \underline{\hspace{2cm}}$

3.  $21677 \div 53 = \underline{\hspace{2cm}}$

4.  $3432 \div 143 = \underline{\hspace{2cm}}$

5. Write 704,000,000 in words.  
 \_\_\_\_\_  
 \_\_\_\_\_

6. Write ninety-one trillion in numbers.  
 \_\_\_\_\_

7. Write 16.004 in words.  
 \_\_\_\_\_  
 \_\_\_\_\_

8. Write twelve and seventeen hundredths in numbers.  
 \_\_\_\_\_

9. Factors of 34 =  $\underline{\hspace{2cm}}$

10. Find the average of 100, 200, and 306.

11.  $9.793 + 16.4 + 35 = \underline{\hspace{2cm}}$

12.  $38.4 - 13.159 = \underline{\hspace{2cm}}$

13. Round off 708,543 to the nearest thousand.  
 \_\_\_\_\_

14. Round off .773491 to the nearest thousandth.  
 \_\_\_\_\_

15. Round off 73.9931 to the nearest one.  
 \_\_\_\_\_

16.  $21.8 \times 3.7 = \underline{\hspace{2cm}}$

17. Write MMDCCCXLVI in Arabic numbers.  
 \_\_\_\_\_

18. Write 3,438 in Roman numerals.  
 \_\_\_\_\_

19. Harvey sees that a library was built in MDCCCXCIII—that's the way the date is carved on the front of the building. What year was that? Answer in Arabic numbers.  
 \_\_\_\_\_

20. A supersonic airliner traveled 5,808 miles in 4 hours. How far did it travel each hour?  
 \_\_\_\_\_

21. How far can the same plane travel in 3 hours at the same speed?  
 \_\_\_\_\_

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22. A man who weighs 208 pounds hears that he would weigh much less on the moon because the moon's gravity isn't as strong as ours. He finds out that his weight on the moon would be .17 of what it is on earth. How much would he weigh on the moon?

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23. A runner is puffing around a track training for a big race. His heart is beating 119 times a minute. If he keeps running for 55 minutes, how many times will his heart beat during that time?

---

**WEIGHT**

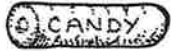
**English**

Unit	Abbreviation
ounce	oz
pound	lb
ton	tn

**Metric**

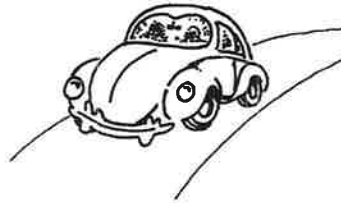
Unit	Abbreviation
milligram	mg
gram	g
kilogram	kg

one ounce



one pound

one ton



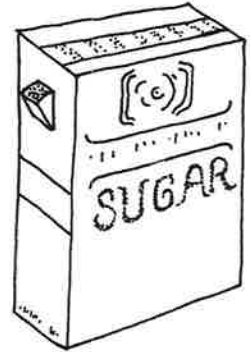
one milligram =

 one small eyelash

one gram



one kilogram



Choose the best measure for each item below. Circle your choices in the English system and then in the metric system.

	English		Metric			
1. Weight of a car.	oz	lb	tn	mg	g	kg
2. Weight of a paper clip.	oz	lb	tn	mg	g	kg
3. Weight of a twelve-year-old boy.	oz	lb	tn	mg	g	kg
4. Weight of a fly.	oz	lb	tn	mg	g	kg
5. Weight of a dog.	oz	lb	tn	mg	g	kg
6. Weight of a bicycle.		25 lb	25 tn		12 g	12 kg
7. Weight of an adult woman.	130 oz	130 lb		59 mg		59 kg
8. Weight of a ruler.	1 oz	1 lb		30 mg	30 g	
	English		Metric			
9. Weight of a person.	mi	in	lb	m	g	kg
10. Volume of water in a raindrop.	oz	in	tn	kg	l	ml
11. Weight of a house.	oz	in	tn	kg	l	ml
12. Weight of a mosquito.	yd	cup	oz	km	mm	mg
13. Length of your arm.	in	lb	qt	g	cm	km
14. Length of a desk.	tn	ft	gal	mg	cm	l
15. Volume of milk in a carton.	lb	gal	ft	l	kg	mg
16. Weight of a cow.	lb	gal	ft	l	kg	mg

**DISTANCE**

Unit	English		Metric	
	Abbreviation	Unit	Abbreviation	Unit
inch	in	millimeter	mm	
foot	ft	centimeter	cm	
yard	yd	meter	m	
mile	mi	kilometer	km	

**VOLUME (Liquids)**

Unit	English		Metric	
	Abbreviation	Unit	Abbreviation	Unit
fluidounce	fl oz	milliliter	ml	
cup		liter	l	
pint	pt			
quart	qt			
gallon	gal			

**WEIGHT**

Unit	English		Metric	
	Abbreviation	Unit	Abbreviation	Unit
ounce	oz	milligram	mg	
pound	lb	gram	g	
ton	tn	kilogram	kg	

Choose the best measure for each item below. Circle your choices in the English system and then in the metric system.

	English			Metric		
1. Length of a car.	in	qt	yd	mm	m	kg
2. Volume of shampoo in a bottle.	gal	oz	lb	cm	g	ml
3. Diameter of a button.	oz	in	cup	mg	mm	ml
4. Weight of Earth.	qt	gal	tn	kg	km	g
5. Volume of juice in a can.	2 cups	12 cups		500 ml		500 l
6. Height of a tall tree.	22 in	22 yd		20 cm		20 m
7. Weight of a puppy.	2 lb	20 tn		1 g		1 kg
8. Length of a basketball court.	25 ft	25 yd		30 cm		23 m

On the chart to the right, fill in the best measure for each item below. Use the English system and the metric system.

	English	Metric
9. Weight of an eyelash.	_____	_____
10. Volume of water in a pail.	_____	_____
11. Height of a skyscraper.	_____	_____
12. Volume of water in a melted popsicle.	_____	_____
13. Weight of a tractor.	_____	_____
14. Weight of a dish.	_____	_____
15. Length of a spoon.	_____	_____

Fill in the correct English and metric terms on the charts below. You will receive extra credit if you put the terms in order from smallest to biggest.

Choose your answers from the following list.

- |            |           |                |           |                |
|------------|-----------|----------------|-----------|----------------|
| millimeter | inch      | cup            | foot      | quart          |
| ton        | gram      | ounce (weight) | milligram | pound          |
| yard       | kilometer | centimeter     | mile      | kilogram       |
| pint       | liter     | milliliter     | gallon    | meter          |
|            |           |                |           | ounce (volume) |

**DISTANCE**

**VOLUME (Liquids)**

- |    | English | Metric   |     | English | Metric    |
|----|---------|----------|-----|---------|-----------|
| 1. | _____   | 5. _____ | 9.  | _____   | 14. _____ |
| 2. | _____   | 6. _____ | 10. | _____   | 15. _____ |
| 3. | _____   | 7. _____ | 11. | _____   |           |
| 4. | _____   | 8. _____ | 12. | _____   |           |
|    |         |          | 13. | _____   |           |

**WEIGHT**

- | English   | Metric    |
|-----------|-----------|
| 16. _____ | 19. _____ |
| 17. _____ | 20. _____ |
| 18. _____ | 21. _____ |

**In the metric system, what would be the best measure for the following items?**

22. The weight of a submarine. \_\_\_\_\_
23. The thickness of a dime. \_\_\_\_\_

**In the English system, what would be the best measure for the following items?**

24. The weight of a boy. \_\_\_\_\_
25. The distance to London. \_\_\_\_\_
26. The volume of water in a swimming pool. \_\_\_\_\_



1. Find the interval, and then figure out what  $A$  is on the following number line.



2. Write 217,000 in words. \_\_\_\_\_  
Write forty-nine trillion in numbers. \_\_\_\_\_
3. Factor 50 two ways. \_\_\_\_\_
4.  $27250 \div 9 =$  \_\_\_\_\_
5. Find the average of 263 and 425. \_\_\_\_\_
6. Write 7.06 in words. \_\_\_\_\_  
Write fourteen and twelve thousandths in decimals. \_\_\_\_\_
7.  $3.1 + 89 + 62.43 =$  \_\_\_\_\_
8.  $64.5 - 29.173 =$  \_\_\_\_\_
9. Round off 67,289 to the nearest thousand. \_\_\_\_\_
10. Round off .4782941 to the nearest hundredth. \_\_\_\_\_
11.  $9.67 \times 4.83 =$  \_\_\_\_\_
12. Write MCMLXXVII in Arabic numbers. \_\_\_\_\_  
Write 2,674 in Roman numerals. \_\_\_\_\_
13.  $8964 \div 36 =$  \_\_\_\_\_

Learn the following important facts.

**Money**

5 cents = 1 nickel  
10 cents = 1 dime  
25 cents = 1 quarter  
50 cents = 1 half-dollar  
100 cents = 1 dollar

**Time**

60 seconds = 1 minute  
60 minutes = 1 hour  
24 hours = 1 day  
7 days = 1 week  
365 days = 1 year  
10 years = 1 decade  
100 years = 1 century

**Days in the Months**

Thirty days have September,  
April, June, and November.  
All the rest have thirty-one,  
Except February with  
twenty-eight,  
And twenty-nine in a  
leap year.

Use the facts listed on the left to fill in answers on the following lines.

- 1 day has 24 hours, so 5 days have 120 hours.  
( $24 \times 5 = 120$ )
- 1 dollar has 100 cents, so 4 dollars have \_\_\_\_\_ cents.
- 1 decade has \_\_\_\_\_ years, so 6 decades have \_\_\_\_\_ years.
- 1 year has \_\_\_\_\_ days, so 3 years have \_\_\_\_\_ days.
- 1 quarter has \_\_\_\_\_ cents, so 6 quarters have \_\_\_\_\_ cents.
- 1 dime has \_\_\_\_\_ cents, so 7 dimes have \_\_\_\_\_ cents.
- 1 century has \_\_\_\_\_ years, so 3 centuries have \_\_\_\_\_ years.
- 1 week has \_\_\_\_\_ days, so 5 weeks have \_\_\_\_\_ days.
- How many days are in March? \_\_\_\_\_
- How many days are in April? \_\_\_\_\_
- How many days are in a week? \_\_\_\_\_
- How many years are in a decade? \_\_\_\_\_
- How many years are in a century? \_\_\_\_\_
- How many days are in June? \_\_\_\_\_

Learn and remember the following important facts.

**Distance**

- 12 inches = 1 foot
- 3 feet = 1 yard
- 5,280 feet = 1 mile

**Weight**

- 16 ounces = 1 pound
- 2,000 pounds = 1 ton

**Liquids**

- 2 cups = 1 pint
- 2 pints = 1 quart
- 4 quarts = 1 gallon

**Time**

- 60 seconds = 1 minute
- 60 minutes = 1 hour
- 24 hours = 1 day
- 7 days = 1 week
- 365 days = 1 year
- 10 years = 1 decade
- 100 years = 1 century

**Money**

- 5 cents = 1 nickel
- 10 cents = 1 dime
- 25 cents = 1 quarter
- 50 cents = 1 half-dollar
- 100 cents = 1 dollar

**Days in the Months**

Thirty days have September,  
 April, June, and November.  
 All the rest have thirty-one,  
 Except February with  
 twenty-eight,  
 And twenty-nine in a  
 leap year.

Use the facts listed on the left to fill in answers on the following lines.

1. 1 pound has \_\_\_\_\_ ounces, so 7 pounds have \_\_\_\_\_ ounces.
2. 1 hour has \_\_\_\_\_ minutes, so 4 hours have \_\_\_\_\_ minutes.
3. 1 ton has \_\_\_\_\_ pounds, so 9 tons have \_\_\_\_\_ pounds.
4. 1 gallon has \_\_\_\_\_ quarts, so 10 gallons have \_\_\_\_\_ quarts.
5. 1 week has \_\_\_\_\_ days, so 5 weeks have \_\_\_\_\_ days.
6. 1 dollar has \_\_\_\_\_ cents, so 20 dollars have \_\_\_\_\_ cents.
7. 1 mile has \_\_\_\_\_ feet, so 3 miles have \_\_\_\_\_ feet.
8. 1 year has \_\_\_\_\_ days, so 5 years have \_\_\_\_\_ days.
9. 1 yard has \_\_\_\_\_ feet, so 300 yards have \_\_\_\_\_ feet.
10. 1 decade has \_\_\_\_\_ years, so 4 decades have \_\_\_\_\_ years.
11. How many days are in July? \_\_\_\_\_
12. How many days are in November? \_\_\_\_\_
13. How many days are in April? \_\_\_\_\_
14. How many days are in January? \_\_\_\_\_
15. How many days are in March? \_\_\_\_\_
16. How many days are in June? \_\_\_\_\_
17. How many days are in February in a leap year? \_\_\_\_\_  
 In a non-leap year? \_\_\_\_\_

Circle the best English and metric measure for the distance across the Atlantic Ocean.

- |                                     |                                                       |
|-------------------------------------|-------------------------------------------------------|
| 1. inches<br>feet<br>yards<br>miles | 2. millimeters<br>centimeters<br>meters<br>kilometers |
|-------------------------------------|-------------------------------------------------------|

Write the best English and metric measure for the length of your thumb.

3. \_\_\_\_\_ 4. \_\_\_\_\_

Circle the best English and metric measure for the volume of milk in a small glass.

- |                                            |                        |
|--------------------------------------------|------------------------|
| 5. ounce<br>cup<br>pint<br>quart<br>gallon | 6. milliliter<br>liter |
|--------------------------------------------|------------------------|

Write the best English and metric measure for the volume of water in a bathtub.

7. \_\_\_\_\_ 8. \_\_\_\_\_

Circle the best English and metric measure for the weight of an ocean liner.

- |                          |                                   |
|--------------------------|-----------------------------------|
| 9. ounce<br>pound<br>ton | 10. milligram<br>gram<br>kilogram |
|--------------------------|-----------------------------------|

Write the best English and metric measure for the weight of a letter.

11. \_\_\_\_\_ 12. \_\_\_\_\_

13. Write 407,000,000,000 in words.

\_\_\_\_\_

\_\_\_\_\_

14. Write ninety-four trillion in numbers.

\_\_\_\_\_

15. Find the interval, and then figure out what A is on the following number line.



A = \_\_\_\_\_

16. Factors of 99 = \_\_\_\_\_

17. Find the average of 97, 14, 28, and 53.

\_\_\_\_\_

18. Write 3.05 in words.

\_\_\_\_\_

\_\_\_\_\_

19. Write sixteen and twelve thousandths in decimals.

\_\_\_\_\_

20.  $29 + 3.59 =$  \_\_\_\_\_

21.  $36.4 - 29.177 =$  \_\_\_\_\_

22. Round off 78,342,799,418 to the nearest billion.

\_\_\_\_\_

23. Round off .777431 to the nearest hundredth.

\_\_\_\_\_

24. Round off 17.83 to the nearest one.

\_\_\_\_\_

25. Round off 98.15 to the nearest one.

\_\_\_\_\_

26.  $45.3 \times 1.8 =$  \_\_\_\_\_

27. Write MMCDLXVII in Arabic numbers.

\_\_\_\_\_

28. Write 3,449 in Roman numerals.

\_\_\_\_\_

29.  $15043 \div 49 =$  \_\_\_\_\_

30.  $26411 \div 49 =$  \_\_\_\_\_

---

31. Sylvia had \$198.73 in her checking account in the bank. She wrote a check for \$38.69 for a cassette tape recorder. How much was left in the bank?

---

32. Harvey the Wizard took four math tests and got the following grades: 94, 87, 95, and 92. What was his average for these tests?

---

**Remember the following facts.**

**Distance**

12 inches = 1 foot  
 3 feet = 1 yard  
 5,280 feet = 1 mile

**Weight**

16 ounces = 1 pound  
 2,000 pounds = 1 ton

**Liquids**

2 cups = 1 pint  
 2 pints = 1 quart  
 4 quarts = 1 gallon

**Time**

60 seconds = 1 minute  
 60 minutes = 1 hour  
 24 hours = 1 day  
 7 days = 1 week  
 365 days = 1 year  
 10 years = 1 decade  
 100 years = 1 century

**Money**

5 cents = 1 nickel  
 10 cents = 1 dime  
 25 cents = 1 quarter  
 50 cents = 1 half-dollar  
 100 cents = 1 dollar

**Days in the Months**

Thirty days have September, April, June, and November.  
 All the rest have thirty-one, Except February with twenty-eight,  
 And twenty-nine in a leap year.

**Answer the following questions. On the first fifteen you will have to divide.**

1. How many hours are in 180 minutes? \_\_\_\_\_
2. How many quarters are in 75 cents? \_\_\_\_\_
3. How many gallons are in 20 quarts? \_\_\_\_\_
4. How many pounds are in 64 ounces? \_\_\_\_\_
5. How many days are in 48 hours? \_\_\_\_\_
6. How many weeks are in 42 days? \_\_\_\_\_
7. How many miles are in 31,680 feet? \_\_\_\_\_
8. How many feet are in 60 inches? \_\_\_\_\_
9. How many dimes are in 40 cents? \_\_\_\_\_
10. How many pints are in 16 cups? \_\_\_\_\_
11. How many yards are in 27 feet? \_\_\_\_\_
12. How many tons are in 14,000 pounds? \_\_\_\_\_
13. How many years are in 730 days? \_\_\_\_\_
14. How many minutes are in 300 seconds? \_\_\_\_\_
15. How many nickels are in 90 cents? \_\_\_\_\_
16. How many days are in April? \_\_\_\_\_
17. How many days are in December? \_\_\_\_\_
18. How many days are in June? \_\_\_\_\_
19. How many days are in May? \_\_\_\_\_
20. How many days are in July? \_\_\_\_\_

**Fill in the correct answers.**

21. 10 days = \_\_\_\_\_ week and \_\_\_\_\_ days.
22. 19 ounces = \_\_\_\_\_ pound and \_\_\_\_\_ ounces.
23. 113 cents = \_\_\_\_\_ dollar and \_\_\_\_\_ cents.
24. 72 minutes = \_\_\_\_\_ hour and \_\_\_\_\_ minutes.
25. 23 days = \_\_\_\_\_ weeks and \_\_\_\_\_ days.

Fill in the correct answers on the following lines to complete the facts.

**Distance**

1. \_\_\_ inches = 1 foot
2. \_\_\_ feet = 1 yard
3. \_\_\_ feet = 1 mile

**Weight**

4. \_\_\_ ounces = 1 pound
5. \_\_\_ pounds = 1 ton

**Liquids**

6. \_\_\_ cups = 1 pint
7. \_\_\_ pints = 1 quart
8. \_\_\_ quarts = 1 gallon

**Time**

9. \_\_\_ seconds = 1 minute
10. \_\_\_ minutes = 1 hour
11. \_\_\_ hours = 1 day
12. \_\_\_ days = 1 week
13. \_\_\_ days = 1 year
14. \_\_\_ years = 1 decade
15. \_\_\_ years = 1 century

**Money**

16. \_\_\_ cents = 1 nickel
17. \_\_\_ cents = 1 dime
18. \_\_\_ cents = 1 quarter
19. \_\_\_ cents = 1 half-dollar
20. \_\_\_ cents = 1 dollar

**Days in the Months**

21. \_\_\_ days have September, April, June, and November.  
All the rest have \_\_\_\_,  
Except February with \_\_\_\_,  
And \_\_\_ in a leap year.

Answer the following questions. Be careful; some call for multiplication and others for division.

22. How many pounds in 8 tons? \_\_\_\_\_
23. How many quarts are in 6 pints? \_\_\_\_\_
24. How many feet are in 5 yards? \_\_\_\_\_
25. How many centuries are in 500 years? \_\_\_\_\_
26. How many dimes are in 60 cents? \_\_\_\_\_
27. How many cups are in 2 pints? \_\_\_\_\_
28. How many days are in 3 years? \_\_\_\_\_
29. How many feet are in 6 miles? \_\_\_\_\_
30. How many pounds are in 160 ounces? \_\_\_\_\_
31. How many years are in 2 decades? \_\_\_\_\_
32. How many minutes are in 240 seconds? \_\_\_\_\_
33. How many days are in 8 years? \_\_\_\_\_
34. How many weeks are in 28 days? \_\_\_\_\_
35. How many minutes are in 6 hours? \_\_\_\_\_
36. How many minutes are in 3 hours? \_\_\_\_\_
37. How many feet are in 84 inches? \_\_\_\_\_
38. How many days are in November? \_\_\_\_\_
39. How many days are in August? \_\_\_\_\_
40. How many days are in September? \_\_\_\_\_
41. How many days are in a non-leap year February? \_\_\_\_\_

Fill in the correct answers.

42. 9 quarts = \_\_\_\_\_ gallons and \_\_\_\_\_ quart.
43. 49 hours = \_\_\_\_\_ days and \_\_\_\_\_ hour.
44. 213 cents = \_\_\_\_\_ dollars and \_\_\_\_\_ cents.
45. 29 days = \_\_\_\_\_ weeks and \_\_\_\_\_ day.
46. 428 years = \_\_\_\_\_ centuries, \_\_\_\_\_ decades, \_\_\_\_\_ years.
47. 400 days = \_\_\_\_\_ year and \_\_\_\_\_ days.

Fill in the following lines to complete the facts.

1. \_\_\_\_\_ inches = 1 foot
2. \_\_\_\_\_ feet = 1 yard
3. \_\_\_\_\_ feet = 1 mile
4. \_\_\_\_\_ ounces = 1 pound
5. \_\_\_\_\_ pounds = 1 ton
6. \_\_\_\_\_ cups = 1 pint
7. \_\_\_\_\_ pints = 1 quart
8. \_\_\_\_\_ quarts = 1 gallon
9. \_\_\_\_\_ seconds = 1 minute
10. \_\_\_\_\_ minutes = 1 hour
11. \_\_\_\_\_ hours = 1 day
12. \_\_\_\_\_ days = 1 week
13. \_\_\_\_\_ days = 1 year
14. \_\_\_\_\_ years = 1 decade
15. \_\_\_\_\_ years = 1 century
16. \_\_\_\_\_ cents = 1 nickel
17. \_\_\_\_\_ cents = 1 dime
18. \_\_\_\_\_ cents = 1 quarter
19. \_\_\_\_\_ cents = 1 half-dollar
20. \_\_\_\_\_ cents = 1 dollar
21. \_\_\_\_\_ days, have September  
April, June, and November.

All the rest have \_\_\_\_\_.

Except February with \_\_\_\_\_

And \_\_\_\_\_ in a leap year.

Now answer the following questions.

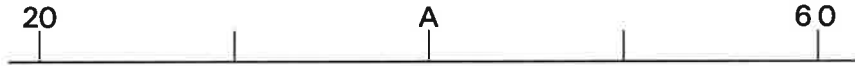
22. How many pounds are in 3 tons? \_\_\_\_\_
23. How many cents are in 5 dollars? \_\_\_\_\_
24. How many ounces are in 4 pounds? \_\_\_\_\_
25. How many cents are in 7 nickels? \_\_\_\_\_
26. How many feet are in 10 yards? \_\_\_\_\_
27. How many pounds are in 6 tons? \_\_\_\_\_
28. How many pints are in 4 quarts? \_\_\_\_\_
29. How many minutes are in 5 hours? \_\_\_\_\_
30. How many days are in 9 weeks? \_\_\_\_\_
31. How many inches are in 8 feet? \_\_\_\_\_
32. How many feet are in 4 miles? \_\_\_\_\_
33. How many seconds are in 3 minutes? \_\_\_\_\_
34. How many days are in 5 years? \_\_\_\_\_
35. How many cents are in 5 quarters? \_\_\_\_\_
36. How many years are in 8 centuries? \_\_\_\_\_
37. How many quarts are in 18 gallons? \_\_\_\_\_
38. How many days are in November? \_\_\_\_\_
39. How many days are in January? \_\_\_\_\_
40. How many days are in March? \_\_\_\_\_
41. How many days are in June? \_\_\_\_\_

Fill in the correct answers.

42. 12 days = \_\_\_\_\_ week and \_\_\_\_\_ days.
43. 212 cents = \_\_\_\_\_ dollars and \_\_\_\_\_ cents.
44. 600 days = \_\_\_\_\_ year and \_\_\_\_\_ days.
45. 9 quarts = \_\_\_\_\_ gallons and \_\_\_\_\_ quart.
46. 50 hours = \_\_\_\_\_ days and \_\_\_\_\_ hours.



1. Find the interval, and then figure out what  $A$  is on the following number line.



$A =$  \_\_\_\_\_

2. Write 97,000,000 in words. \_\_\_\_\_

Write five hundred thousand in numbers. \_\_\_\_\_

3. Factor 40 three ways. \_\_\_\_\_

4.  $49643 \div 8 =$  \_\_\_\_\_

5. Find the average of 7, 9, and 5. \_\_\_\_\_

6. Write 12.017 in words. \_\_\_\_\_

Write four and one hundredth in decimals. \_\_\_\_\_

7.  $680 + 29.6 =$  \_\_\_\_\_

8.  $21.4 - 6.289 =$  \_\_\_\_\_

9. Round off 26,549,342,015 to the nearest billion. \_\_\_\_\_

10. Round off 49.3789218 to the nearest one. \_\_\_\_\_

11.  $8.06 \times 26 =$  \_\_\_\_\_

12. Write MMMDCXLIII in Arabic numbers. \_\_\_\_\_

Write 2,368 in Roman numerals. \_\_\_\_\_

13.  $9716 \div 28 =$  \_\_\_\_\_

When you divide decimals, follow these steps:

- 1) Move the decimal point over to the right side of the divisor.
- 2) Move the decimal point over the same number of places to the right in the dividend.
- 3) In the answer, put the decimal point straight above the place where it is in the dividend.
- 4) Divide.

$$\begin{array}{r} .45 \overline{) 1.035} \\ \underline{.90} \phantom{0} \\ 135 \\ \underline{135} \\ 0 \end{array}$$

dividend  
2 places      2 places

Put the decimal points in the correct places in each answer below.

1. 
$$\begin{array}{r} 751 \\ .38 \overline{) 2853.8} \\ \underline{75} \phantom{0} \\ 103 \phantom{0} \\ \underline{76} \phantom{0} \\ 273 \phantom{0} \\ \underline{230} \phantom{0} \\ 438 \\ \underline{430} \\ 80 \end{array}$$
  
2 places      2 places

2. 
$$\begin{array}{r} 806 \\ 2.9 \overline{) 233.74} \\ \underline{58} \phantom{0} \\ 173 \phantom{0} \\ \underline{174} \\ 4 \end{array}$$

3. 
$$\begin{array}{r} 243 \\ .7 \overline{) .1701} \\ \underline{.49} \phantom{0} \\ .68 \phantom{0} \\ \underline{.49} \phantom{0} \\ .190 \\ \underline{.140} \\ .501 \\ \underline{.490} \\ .11 \end{array}$$

4. 
$$\begin{array}{r} 642 \\ .013 \overline{) .8346} \\ \underline{.65} \phantom{0} \\ .184 \phantom{0} \\ \underline{.156} \phantom{0} \\ .286 \\ \underline{.279} \\ .076 \\ \underline{.070} \\ .06 \end{array}$$

5. 
$$\begin{array}{r} 864 \\ .9 \overline{) 77.76} \\ \underline{81} \phantom{0} \\ .67 \phantom{0} \\ \underline{.81} \\ .86 \end{array}$$

6. 
$$\begin{array}{r} 374 \\ 3.64 \overline{) 13.6136} \\ \underline{1092} \phantom{0} \\ 2693 \phantom{0} \\ \underline{2552} \phantom{0} \\ 14136 \\ \underline{14520} \\ .36 \end{array}$$

Now work out the following problems. Be sure to put the decimal points in the correct places.

7. 
$$.5 \overline{) 3.640}$$

8. 
$$.7 \overline{) 44.94}$$

9. 
$$.6 \overline{) 34.32}$$

10. 
$$.3 \overline{) .2853}$$

11. 
$$.7 \overline{) .413}$$

12. 
$$.8 \overline{) 29.6}$$

13. 
$$.4 \overline{) 3.32}$$

14. 
$$.9 \overline{) .333}$$

Put the decimal points in the correct places in the following answers.

1. 
$$\begin{array}{r} 681 \\ 2.6 \overline{) 1.7706} \end{array}$$

2. 
$$\begin{array}{r} 684 \\ .05 \overline{) .3420} \end{array}$$

3. 
$$\begin{array}{r} 684 \\ .31 \overline{) 21.204} \end{array}$$

4. 
$$\begin{array}{r} 354 \\ .541 \overline{) 1.91514} \end{array}$$

5. 
$$\begin{array}{r} 842 \\ .007 \overline{) .5894} \end{array}$$

6. 
$$\begin{array}{r} 842 \\ .00235 \overline{) 1.97870} \end{array}$$

Now work out the following problems. Be sure to put the decimal points in the correct places.

7. 
$$.6 \overline{) 5.118}$$

8. 
$$.5 \overline{) 22.15}$$

9. 
$$.7 \overline{) 213.5}$$

10. 
$$.9 \overline{) 6.777}$$

11. 
$$.27 \overline{) 1.8144}$$

12. 
$$2.7 \overline{) 123.93}$$

1. Circle the best metric measure for your weight.

milligrams  
grams  
kilograms

2. Circle the best metric measure for the length of your foot.

millimeter  
centimeter  
meter  
kilometer

3. Circle the best metric measure for a spoonful of medicine.

milliliter  
liter

4. How many inches are in a foot? \_\_\_\_\_
5. How many feet are in a yard? \_\_\_\_\_
6. How many feet are in a mile? \_\_\_\_\_
7. How many ounces are in a pound? \_\_\_\_\_
8. How many pounds are in a ton? \_\_\_\_\_
9. How many cups are in a pint? \_\_\_\_\_
10. How many pints are in a quart? \_\_\_\_\_
11. How many quarts are in a gallon? \_\_\_\_\_
12. How many seconds are in a minute? \_\_\_\_\_
13. How many minutes are in an hour? \_\_\_\_\_
14. How many hours are in a day? \_\_\_\_\_
15. How many days are in a year? \_\_\_\_\_
16. How many days are in a leap year? \_\_\_\_\_
17. How many years are in a decade? \_\_\_\_\_
18. How many years are in a century? \_\_\_\_\_
19. How many days are in January? \_\_\_\_\_
20. How many days are in June? \_\_\_\_\_
21. How many days are in December? \_\_\_\_\_
22. How many days are in February  
in a leap year? \_\_\_\_\_  
in a non-leap year? \_\_\_\_\_

23. Find the interval, and then figure out what A is on the following number line.



A = \_\_\_\_\_

24. Write 305,000 in words.  
\_\_\_\_\_
25. Write two hundred trillion in numbers.  
\_\_\_\_\_
26. Factors of 42 = \_\_\_\_\_
27. Find the average of 41 and 37.  
\_\_\_\_\_
28. Write 16.002 in words.  
\_\_\_\_\_
29. Write five and eleven hundredths in decimals.  
\_\_\_\_\_
30.  $78 + 4.908 =$  \_\_\_\_\_
31.  $61.9 - 28.715 =$  \_\_\_\_\_
32. Round off 78,935 to the nearest thousand.  
\_\_\_\_\_
33. Round off 6.333333 to the nearest tenth.  
\_\_\_\_\_
34. Write MCDLXXX in Arabic numbers.  
\_\_\_\_\_
35.  $42.3 \times .15 =$  \_\_\_\_\_

---

36. Write 3,933 in Roman numerals.

---

37. Gloria and her best friend decide to take an 855 mile bicycle trip. They think they can go about 45 miles a day. About how long will the trip take?

---

38. Mr. Gleason took his family to a restaurant to celebrate his wife's birthday. Mr. Gleason's order came to \$8.73, his wife's food came to \$4.79, his son's order was \$9.05, and his daughter's came to \$5.15. What was the total bill?

---

Put decimal points in the correct places in the following answers. You may have to add a zero to the beginning or end of some answers.

1. 
$$\begin{array}{r} 753 \\ .64 \overline{)4819.2} \end{array}$$

2. 
$$\begin{array}{r} 807 \\ 2.1 \overline{)1.6947} \end{array}$$

3. 
$$\begin{array}{r} 649 \\ 34.2 \overline{)2.21958} \end{array}$$

In the following problems you don't have to move a decimal point in the divisor, so just bring the decimal point in the dividend straight up into the answer.

4. 
$$\begin{array}{r} 685 \\ 7 \overline{)47.95} \end{array}$$

5. 
$$\begin{array}{r} 756 \\ 62 \overline{)46.872} \end{array}$$

6. 
$$\begin{array}{r} 842 \\ 9 \overline{)757.8} \end{array}$$

7. 
$$\begin{array}{r} 84 \\ 6 \overline{)5.04} \end{array}$$

Now work out the following problems. Make sure you put decimal points in the correct places.

8. 
$$\begin{array}{r} 4 \\ .4 \overline{)2.728} \end{array}$$

9. 
$$\begin{array}{r} 5 \\ 5 \overline{)29.80} \end{array}$$

10. 
$$\begin{array}{r} 07 \\ .07 \overline{)459.9} \end{array}$$

11. 
$$\begin{array}{r} 2 \\ 2 \overline{)3.8} \end{array}$$

12. 
$$\begin{array}{r} 63 \\ .63 \overline{)19.404} \end{array}$$

13. 
$$\begin{array}{r} 63 \\ 6.3 \overline{)61.173} \end{array}$$

Carefully work out the following problems. Make sure to put the decimal points in the correct places.

1.  $.6 \overline{) 51.786}$

2.  $5 \overline{) 247.0}$

3.  $.07 \overline{) 4.081}$

4.  $.3 \overline{) 21.6}$

5.  $.37 \overline{) 9.879}$

6.  $.037 \overline{) 234.58}$

Do the next two word problems.

7. A candy bar costs \$ .06 (six cents). How many candy bars can a girl buy with \$1.50?

\_\_\_\_\_

8. A teacher finds \$46.25 and decides to divide the money evenly among the 37 students in her class. How much will each student get?

\_\_\_\_\_

Put the decimal point in the correct place in each answer.

$$1. \quad 4.6 \overline{) 302.22} \quad \begin{array}{r} 657 \\ \hline \end{array}$$

$$2. \quad .04 \overline{) 3.364} \quad \begin{array}{r} 841 \\ \hline \end{array}$$

$$3. \quad .0149 \overline{) 5.215} \quad \begin{array}{r} 35 \\ \hline \end{array}$$

$$4. \quad 8 \overline{) 30.72} \quad \begin{array}{r} 384 \\ \hline \end{array}$$

Now solve the following problems.

$$5. \quad .7 \overline{) 4.774}$$

$$6. \quad 5 \overline{) 381.5}$$

$$7. \quad .006 \overline{) 25.56}$$

$$8. \quad .43 \overline{) 15.093}$$

$$9. \quad 4.3 \overline{) 2.8896}$$

Solve the word problem below.

10. A candy bar costs \$.09 (nine cents). How many can you buy for \$5.76?

---



1. Find the interval, and then figure out what  $A$  is on the following number line.



2. Write 218,000,000,000,000 in words. \_\_\_\_\_

Write nine hundred nine million in numbers. \_\_\_\_\_

3. Factor 35. \_\_\_\_\_

4.  $36320 \div 6 =$  \_\_\_\_\_

5. What is the average of 87, 74, and 91? \_\_\_\_\_

6. Write 8.12 in words. \_\_\_\_\_

Write fifteen and seven thousandths in decimals. \_\_\_\_\_

7.  $42.96 + 2.147 =$  \_\_\_\_\_

8.  $8.6 - 2.475 =$  \_\_\_\_\_

9. Round off 27,218 to the nearest thousand. \_\_\_\_\_

10. Round off .7777777 to the nearest hundredth. \_\_\_\_\_

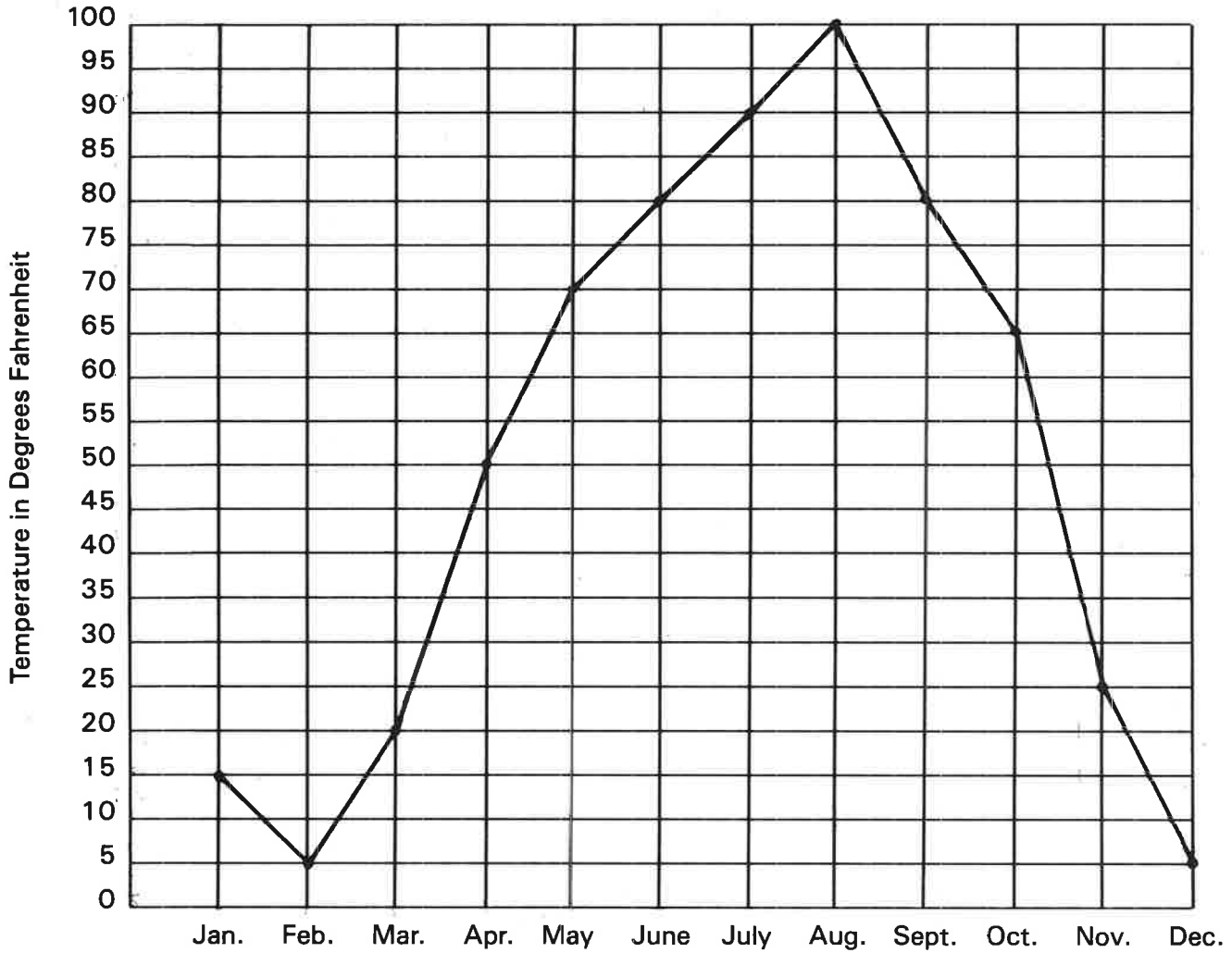
11.  $29.7 \times 4.3 =$  \_\_\_\_\_

12. Write MMDCCCLXIX in Arabic numbers. \_\_\_\_\_

Write 3,427 in Roman numerals. \_\_\_\_\_

13.  $213.18 \div 3.4 =$  \_\_\_\_\_

This *line graph* shows the highest temperature in each of the 12 months of the year in one American city.



Use the graph above to answer the following questions.

1. What was the high temperature in May? \_\_\_\_\_
2. What were the two coldest months? \_\_\_\_\_
3. What was the next-to-hottest month? \_\_\_\_\_
4. The biggest rise in temperature came after which month? \_\_\_\_\_
5. In which two months was the high temperature 80°? \_\_\_\_\_
6. In which month was the high temperature 20°? \_\_\_\_\_
7. By looking at this graph, what could you say about the climate of this city? Would you want to live there? Why or why not?

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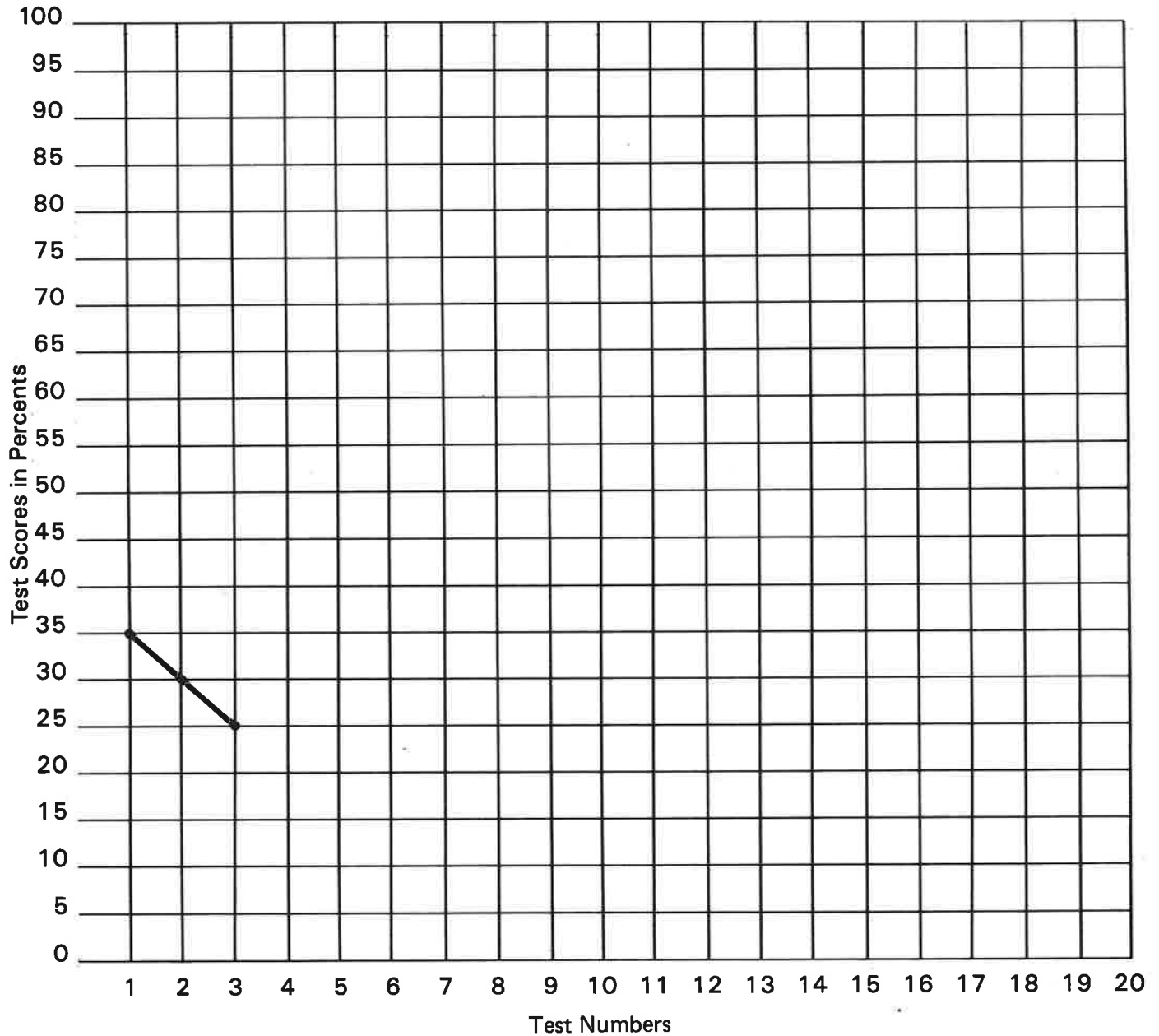


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# Graphing 2

Make a line graph of a boy's spelling test scores during the year. The first three have been done for you.

Test 1	35%	Test 6	40%	Test 11	55%	Test 16	90%
Test 2	30%	Test 7	45%	Test 12	80%	Test 17	90%
Test 3	25%	Test 8	55%	Test 13	5%	Test 18	95%
Test 4	30%	Test 9	60%	Test 14	70%	Test 19	100%
Test 5	30%	Test 10	60%	Test 15	80%	Test 20	100%



Work out a times table chart for 67 and use it to solve the following division problems.

$67 \times 1 = \underline{\hspace{2cm}}$

$67 \times 2 = \underline{\hspace{2cm}}$

$67 \times 3 = \underline{\hspace{2cm}}$

$67 \times 4 = \underline{\hspace{2cm}}$

$67 \times 5 = \underline{\hspace{2cm}}$

$67 \times 6 = \underline{\hspace{2cm}}$

$67 \times 7 = \underline{\hspace{2cm}}$

$67 \times 8 = \underline{\hspace{2cm}}$

$67 \times 9 = \underline{\hspace{2cm}}$

1.  $351.08 \div 6.7 = \underline{\hspace{2cm}}$

2.  $.12931 \div .67 = \underline{\hspace{2cm}}$

3.  $27202 \div 6.7 = \underline{\hspace{2cm}}$

4.  $65.124 \div 67 = \underline{\hspace{2cm}}$

5. How many days are in March?  $\underline{\hspace{2cm}}$

6. How many days are in September?  $\underline{\hspace{2cm}}$

7. How many pounds are in a ton?  $\underline{\hspace{2cm}}$

8. How many days are in a non-leap year?  
 $\underline{\hspace{2cm}}$

9. How many ounces are in a pound?  $\underline{\hspace{2cm}}$

10. How many minutes are in an hour?  $\underline{\hspace{2cm}}$

11. How many quarts are in a gallon?  $\underline{\hspace{2cm}}$

12. How many inches are in a foot?  $\underline{\hspace{2cm}}$

13. Find the interval, and figure out what *A* is on the following number line.



A =  $\underline{\hspace{2cm}}$

14. Write 419,000,000 in words.

$\underline{\hspace{20cm}}$   
 $\underline{\hspace{20cm}}$

15. Write seventeen billion in numbers.

$\underline{\hspace{20cm}}$

16. Factors of 18 =  $\underline{\hspace{2cm}}$

17. Find the average of 35, 48, and 28.

$\underline{\hspace{20cm}}$

18. Write 19.003 in words.

$\underline{\hspace{20cm}}$   
 $\underline{\hspace{20cm}}$

19. Write two and nine tenths in decimals.

$\underline{\hspace{20cm}}$

20.  $7.14 + 48.937 = \underline{\hspace{2cm}}$

21.  $63.5 - 21.731 = \underline{\hspace{2cm}}$

22. Round off 67,922,318 to the nearest million.

$\underline{\hspace{20cm}}$

23. Round off .428472 to the nearest thousandth.

$\underline{\hspace{20cm}}$

24. Write MDC in Arabic numbers.

$\underline{\hspace{20cm}}$

25. Write MMLXXVII in Arabic numbers.

$\underline{\hspace{20cm}}$

26. Write 3,429 in Roman numerals.

$\underline{\hspace{20cm}}$

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27. Shelley weighs 85 pounds. She hears that on Jupiter she would weigh 2.54 times as much because the gravity there is greater. How much would she weigh if she were standing on Jupiter?

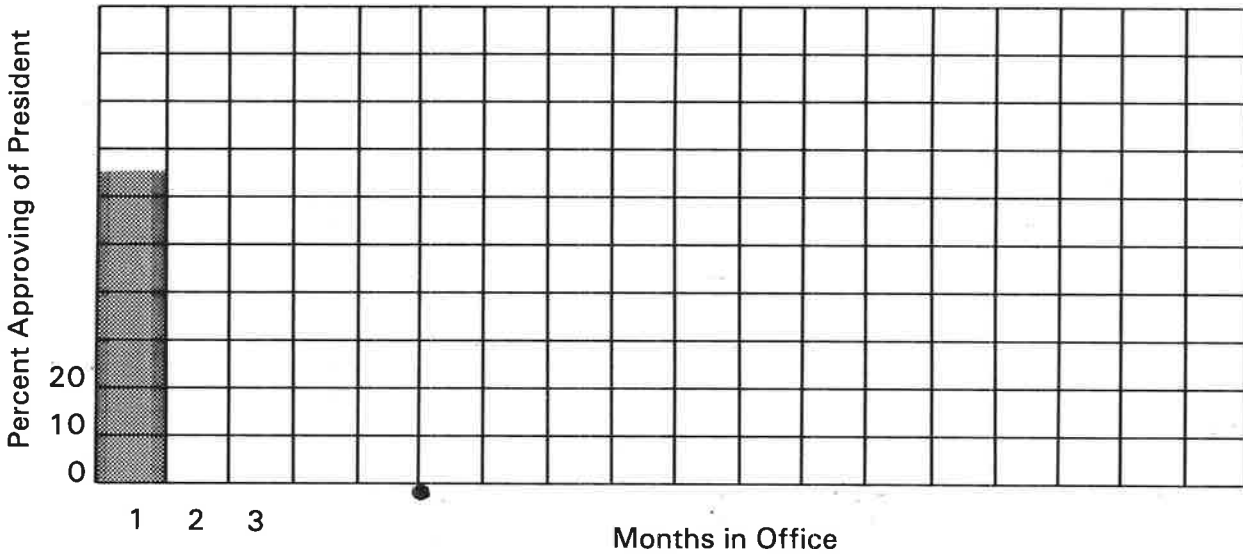
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28. At the beginning of an old book it says that it was published in the year MDCCLXXIX. What year was that?

---

Make a *bar graph* of the number of people who think a make-believe president is doing a good job. Finish numbering the axes of the graph, and then form bars by using the information given below to darken areas on the graph. Note that the horizontal numbers (numbers running across) on a bar graph go in the spaces between the lines. The bar for the president's first month in office has been done for you.

Month 1	65%	Month 7	40%	Month 13	80%
Month 2	70%	Month 8	35%	Month 14	80%
Month 3	73%	Month 9	31%	Month 15	79%
Month 4	80%	Month 10	25%	Month 16	65%
Month 5	71%	Month 11	80%	Month 17	69%
Month 6	65%	Month 12	85%	Month 18	70%



Use the graph above to answer the following questions.

1. In which month was the president most popular? \_\_\_\_\_
2. In which month was the president least popular? \_\_\_\_\_
3. In which month did 31% of the people approve of the president? \_\_\_\_\_
4. In which 2 months did 70% approve of the president? \_\_\_\_\_
5. In which 4 months did the president have a big problem with popularity?  
\_\_\_\_\_
6. In which month did the president win back support? \_\_\_\_\_
7. What did people think of this president over the 18 months? Describe the trend in popularity in your own words.

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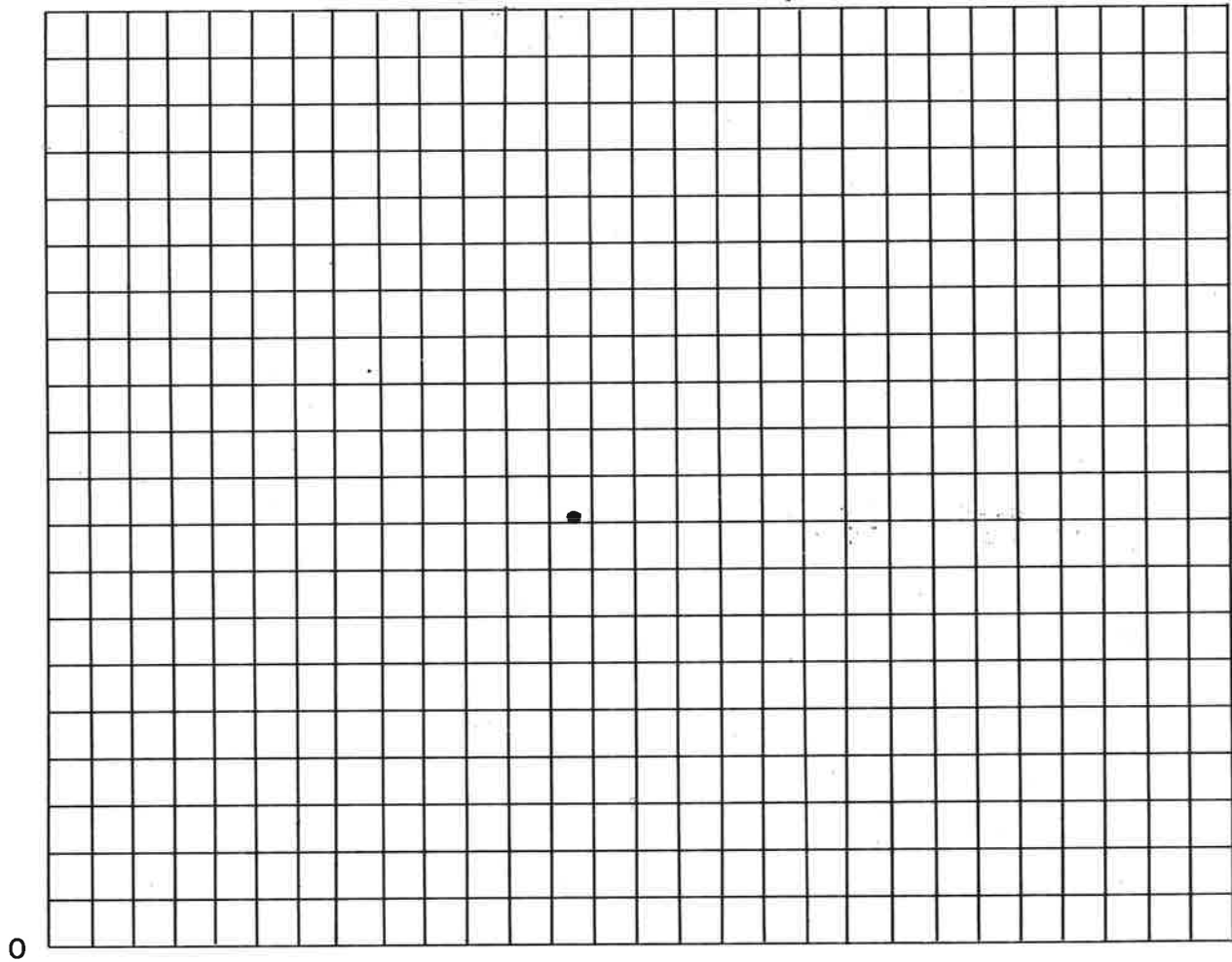
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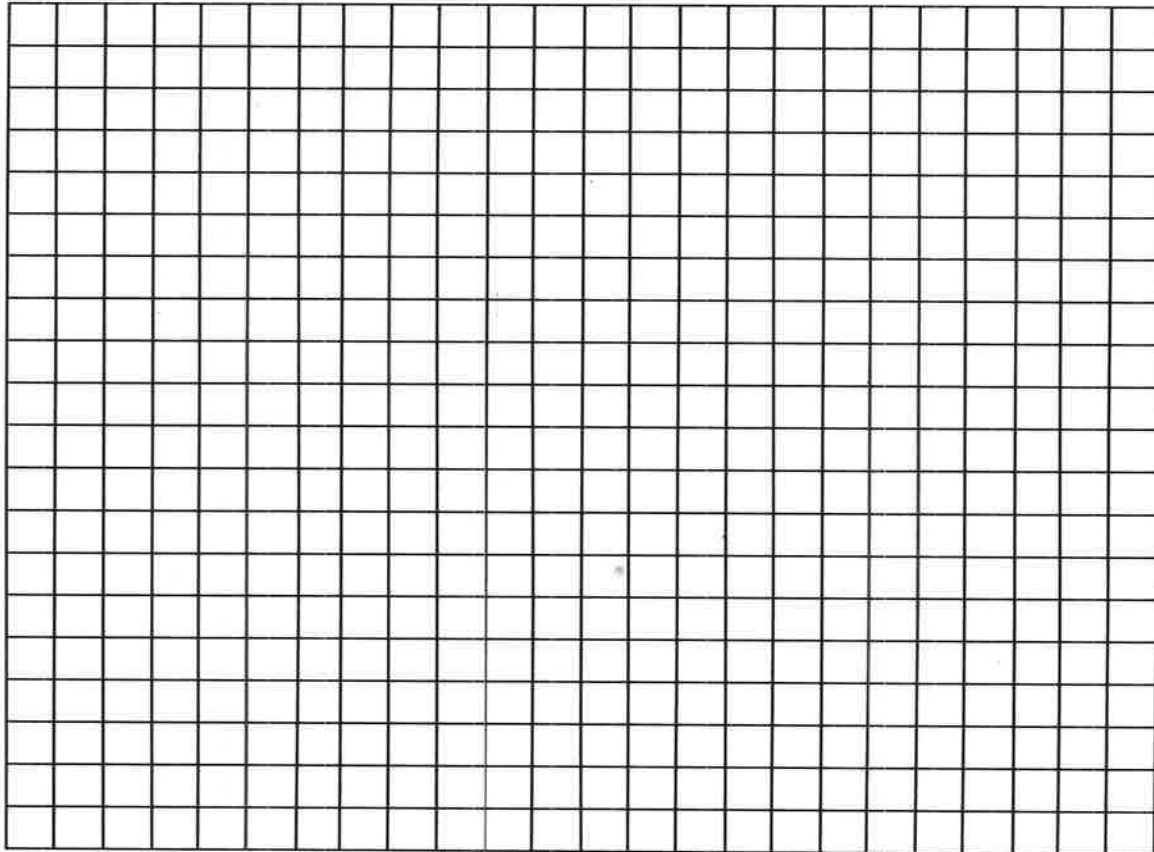
Make a bar graph of the speed of a racing car given at one-minute intervals during a race. First, label the axes on the graph with the minutes running horizontally or across (one to each space) and the speeds running vertically or up and down (10 mph for each line). Then, form bars by darkening areas on the graph according to the information given below.

Minute 1	20 mph	Minute 8	20 mph	Minute 15	150 mph	Minute 22	50 mph
Minute 2	130 mph	Minute 9	100 mph	Minute 16	160 mph	Minute 23	50 mph
Minute 3	150 mph	Minute 10	100 mph	Minute 17	180 mph	Minute 24	75 mph
Minute 4	130 mph	Minute 11	90 mph	Minute 18	200 mph	Minute 25	90 mph
Minute 5	180 mph	Minute 12	95 mph	Minute 19	200 mph	Minute 26	150 mph
Minute 6	200 mph	Minute 13	130 mph	Minute 20	10 mph	Minute 27	190 mph
Minute 7	155 mph	Minute 14	140 mph	Minute 21	40 mph	Minute 28	200 mph



Make a line graph of the number of cars crossing a bridge during a 24-hour period. Label the axes on the graph with the hours running horizontally or across (one hour for each line) and the number of cars running vertically or up and down (5 cars for each line). Use the following information to make your graph.

Hour 1	5 Cars	Hour 7	90 Cars	Hour 13	60 Cars	Hour 19	75 Cars
Hour 2	5 Cars	Hour 8	100 Cars	Hour 14	60 Cars	Hour 20	40 Cars
Hour 3	0 Cars	Hour 9	96 Cars	Hour 15	50 Cars	Hour 21	31 Cars
Hour 4	10 Cars	Hour 10	80 Cars	Hour 16	89 Cars	Hour 22	13 Cars
Hour 5	25 Cars	Hour 11	50 Cars	Hour 17	90 Cars	Hour 23	10 Cars
Hour 6	50 Cars	Hour 12	47 Cars	Hour 18	100 Cars	Hour 24	2 Cars



Use the line graph above to answer the following questions.

1. During which hour did the bridge have the heaviest traffic? \_\_\_\_\_
2. During which hour did the bridge have the lightest traffic? \_\_\_\_\_
3. How many cars crossed the bridge in hour 15? \_\_\_\_\_
4. In which two hours did 90 cars cross the bridge? \_\_\_\_\_
5. Between which hours was there the sharpest increase in traffic? \_\_\_\_\_
6. What can you say about the traffic on this bridge over a 24-hour period? Where do you think the bridge is located? What else can you tell?



1. Find the interval, and then figure out what  $A$  is on the following number line.



2. Write 501,000,000 in words. \_\_\_\_\_

Write sixty trillion in numbers. \_\_\_\_\_

3. Factor 70 two ways. \_\_\_\_\_

4.  $74747 \div 9 =$  \_\_\_\_\_

5. Find the average of 268 and 490. \_\_\_\_\_

6. Write 4.2 in words. \_\_\_\_\_

Write five and one hundredth in decimals. \_\_\_\_\_

7.  $86 + 9.35 =$  \_\_\_\_\_

8.  $24.7 - 15.473 =$  \_\_\_\_\_

9. Round off 35,786,213 to the nearest million. \_\_\_\_\_

10. Round off .64347894 to the nearest thousandth. \_\_\_\_\_

11.  $647 \times .45 =$  \_\_\_\_\_

12. Write MCCCXLII in Arabic numbers. \_\_\_\_\_

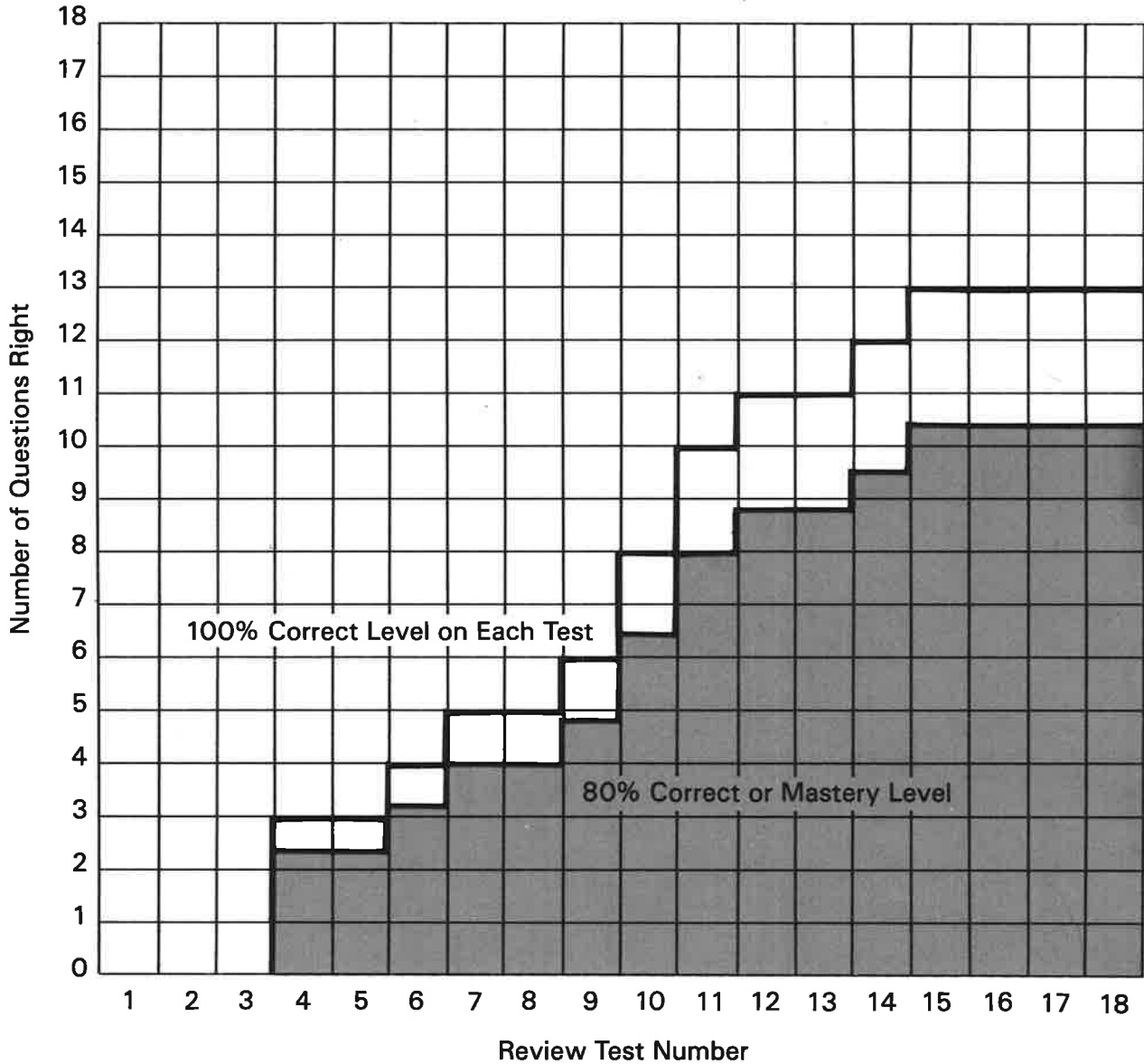
Write 2,863 in Roman numerals. \_\_\_\_\_

13.  $18.441 \div .27 =$  \_\_\_\_\_



# Review Test Progress Graph

After each Review Test is corrected, make a bar graph by filling in the number of questions you got right. The top line climbing up the graph is the number of questions on each test, so if you touch the line, you got one hundred percent correct. The lower line climbing up the graph indicates eighty percent correct or the mastery level which you should reach. During the year, you'll be able to see your progress in math skills grow.








# Progress Chart

Unit		Test Grade	Box *
1	Intervals		
2	Writing Numbers as Words		
3	Factors and Prime Numbers		
4	Prime Factors		
5	One-Number Division		
6	Finding the Average		
7	Place Value		
8	Decimal Place Value		
9	Adding and Subtracting Decimals		
10	Rounding Off Numbers		
11	Two-Number and Three-Number Multiplication		
12	Multiplication of Decimals		
13	Roman Numerals		
14	Two-Number Division		
15	English and Metric Measurement		
16	Measurement and Time		
17	Division of Decimals		
18	Graphing		

## Review Test Grade

4	
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17	
18	

\*  = A, excellent (90-100%)     = B, good (80-89%)     = take again (0-79%)



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