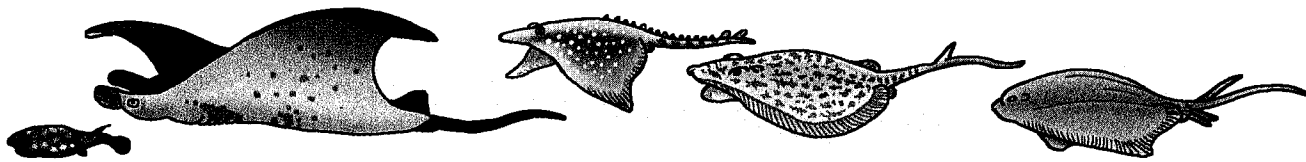


Multiplication as Addition



In addition, the numbers added together are called **addends**.
The answer is called the **sum**.

$$\text{addends} \rightarrow 4 + 4 + 4 = 12 \leftarrow \text{sum}$$

Multiplication is repeated addition of the same addends.
In multiplication, the numbers multiplied together are called **factors**.
The answer is called the **product**.

$$\text{factors} \rightarrow 3 \times 4 = 12 \leftarrow \text{product}$$

The factors can be multiplied in any order, and the product will be the same.

$$3 \times 4 = 12$$

$$4 \times 3 = 12$$

Write the addition problem as a multiplication problem.
Find the sum and product.

1. $2 + 2 + 2 + 2 = \underline{\quad}$

2. $5 + 5 + 5 = \underline{\quad}$

$\underline{\quad} \times \underline{\quad} = \underline{\quad}$

$\underline{\quad} \times \underline{\quad} = \underline{\quad}$

3. $7 + 7 + 7 = \underline{\quad}$

4. $4 + 4 + 4 + 4 + 4 = \underline{\quad}$

$\underline{\quad} \times \underline{\quad} = \underline{\quad}$

$\underline{\quad} \times \underline{\quad} = \underline{\quad}$

5. $6 + 6 + 6 + 6 = \underline{\quad}$

6. $9 + 9 + 9 + 9 + 9 + 9 = \underline{\quad}$

$\underline{\quad} \times \underline{\quad} = \underline{\quad}$

$\underline{\quad} \times \underline{\quad} = \underline{\quad}$

Write the multiplication problem as an addition problem.
Find the product and sum.

7. $6 \times 3 = \underline{\quad} = \underline{\quad} + \underline{\quad} + \underline{\quad} = \underline{\quad}$

8. $8 \times 3 = \underline{\quad} = \underline{\quad} + \underline{\quad} + \underline{\quad} = \underline{\quad}$

Multiplication Word Problems

Solve the problem using multiplication.



1. There are 8 crayons in a box. How many crayons are in 6 boxes?

$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$

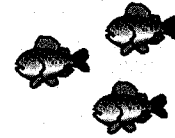


2. Kim runs 3 miles each day. How many miles does he run in one week?

$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$

3. Emma has 9 pairs of socks. How many socks does she have in all?

$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$



4. There are 9 players on each team in the league. The league has 6 teams. How many players are in the league?

$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$



5. Each shelf in the bookcase holds 7 books. The bookcase has 4 shelves. How many books does it hold?

$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$



6. Alex walks his dog twice a day. How many times do they walk in 6 days?

$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$

7. Rosa practices with 8 cans of tennis balls. There are 3 balls in each can. How many tennis balls does Rosa use for practice?

$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$

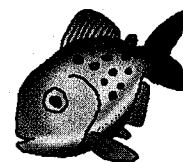


8. There are 9 slices of bread in a loaf. How many bread slices are in 7 loaves?

$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$

9. A package of seeds has 8 seeds. How many seeds are in 5 packages?

$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$



More Word Problems

When you know your multiplication facts, you also know your division facts.

$2 \times 3 = 6$

$3 \times 2 = 6$

$5 \times 7 = 35$

$7 \times 5 = 35$

$6 \div 2 = 3$

$6 \div 3 = 2$

$35 \div 5 = 7$

$35 \div 7 = 5$

Solve the problem using multiplication or division. Write the number sentence.

1. A box of cereal bars has 6 bars. How many cereal bars are in 7 boxes?

2. The students in fourth grade are putting on a play. They want to set up 36 chairs in rows of 9 chairs each. How many rows of chairs will they have?

3. Caleb is reading a book that has 64 pages. If he reads 8 pages a day, how many days will it take him to finish reading the book?

4. A cup holds 8 ounces of juice. How many ounces of juice are in 6 cups?

5. A school has 9 classrooms and 45 jump ropes. If each class gets the same number of jump ropes, how many will each class get?

6. Molly puts 6 pencils in each pencil box. If she has 36 pencils, how many pencil boxes does she fill?

7. A flashlight uses 4 batteries. How many batteries are in 5 flashlights?

Factors

In multiplication, the numbers that are multiplied together are called factors.

$$\text{factors} \rightarrow 2 \times 7 = 14$$

Write a factor in each blank so that the pair of factors equals the product shown. Use the numbers 2, 3, 4, 5, 6, 7, 8, and 9 as factors.

1. _____ \times _____ = 18

2. _____ \times _____ = 25

3. _____ \times _____ = 27

4. _____ \times _____ = 24

5. _____ \times _____ = 30

6. _____ \times _____ = 56

7. _____ \times _____ = 21

8. _____ \times _____ = 49

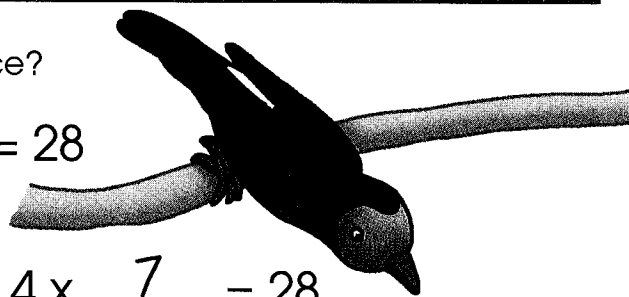
What is the missing factor in this number sentence?

$$4 \times \underline{\quad ? \quad} = 28$$

Divide to find the answer:

$$28 \div 4 = 7$$

$$4 \times \underline{7} = 28$$



Write the missing factor in each number sentence.

9. $3 \times$ _____ = 15

10. _____ $\times 4 = 12$

11. $9 \times$ _____ = 36

12. $7 \times$ _____ = 42

13. _____ $\times 8 = 48$

14. $5 \times$ _____ = 35

15. $8 \times$ _____ = 72

16. $2 \times$ _____ = 16

17. _____ $\times 3 = 21$

18. $8 \times$ _____ = 24

Factors and Prime Numbers

Each factor that can be multiplied to find a product is a factor of that number.

$$12 = 1 \times 12 \quad 12 = 2 \times 6 \quad 12 = 3 \times 4$$

The factors of 12 are: 1, 2, 3, 4, 6, 12

List the factors for each bold number.

1. **9** = 1 × 9 **9** = 3 × 3

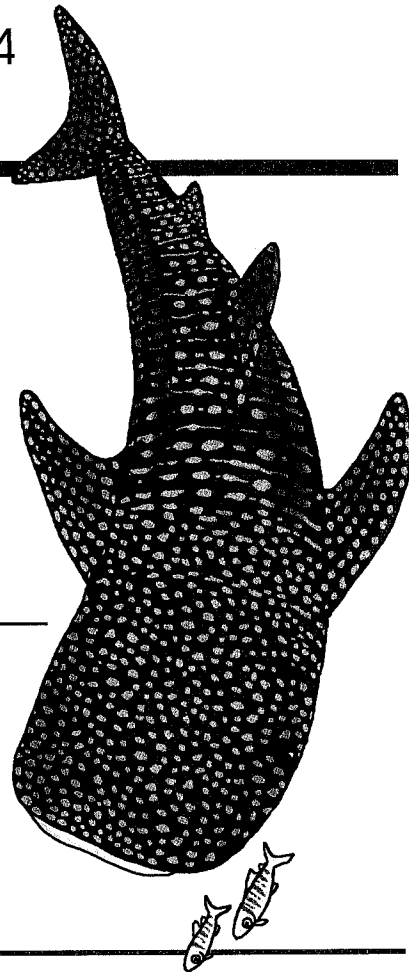
The factors of 9 are: _____, _____, _____

2. **8** = 1 × 8 **8** = 2 × 4

The factors of 8 are: _____, _____, _____, _____

3. **18** = 1 × 18 **18** = 2 × 9 **18** = 3 × 6

The factors of 18 are: _____, _____, _____,
_____, _____, _____



If the factors of a number are only 1 and itself, the number is a **prime number**.

5 = 1 × 5 The factors of 5 are: 1, 5
The number 5 is a prime number.

Fill in the blanks.

4. **10** = 1 × 10 **10** = 2 × 5

The factors of 10 are: _____, _____, _____, _____

Is 10 a prime number? _____

5. **7** = 1 × 7

The factors of 7 are: _____, _____

Is 7 a prime number? _____



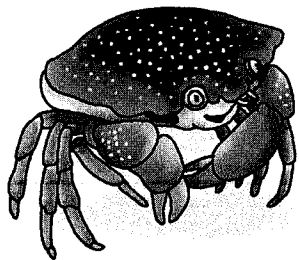
Multiplication Patterns

Use multiplication facts to find products. Look for patterns.

$2 \times 4 = 8$

$2 \times 40 = 80$

$2 \times 400 = 800$



$2 \times 4 \text{ ones} = 8 \text{ ones} = 8$

$2 \times 4 \text{ tens} = 8 \text{ tens} = 80$

$2 \times 4 \text{ hundreds} = 8 \text{ hundreds} = 800$

Find the products.

1. $3 \times 5 =$ _____

$3 \times 50 =$ _____

$3 \times 500 =$ _____

3. $6 \times 7 =$ _____

$6 \times 70 =$ _____

$6 \times 700 =$ _____

5. $2 \times 9 =$ _____

$2 \times 90 =$ _____

$2 \times 900 =$ _____

2. $4 \times 3 =$ _____

$4 \times 30 =$ _____

$4 \times 300 =$ _____

4. $8 \times 8 =$ _____

$8 \times 80 =$ _____

$8 \times 800 =$ _____

6. $7 \times 4 =$ _____

$7 \times 40 =$ _____

$7 \times 400 =$ _____

Fill in the blanks.

7. $4 \times$ _____ $= 160$

8. _____ $\times 30 = 210$

9. $6 \times 200 =$ _____

10. $7 \times$ _____ $= 3500$

11. $3 \times$ _____ $= 900$

12. _____ $\times 9 = 270$

Review Multiplication

Write the addition problem as a multiplication problem.
Find each sum and product.

1. $3 + 3 + 3 = \underline{\quad}$

2. $7 + 7 + 7 + 7 = \underline{\quad}$

$\underline{\quad} \times \underline{\quad} = \underline{\quad}$

$\underline{\quad} \times \underline{\quad} = \underline{\quad}$

3. $8 + 8 + 8 + 8 + 8 = \underline{\quad}$

4. $4 + 4 + 4 + 4 = \underline{\quad}$

$\underline{\quad} \times \underline{\quad} = \underline{\quad}$

$\underline{\quad} \times \underline{\quad} = \underline{\quad}$

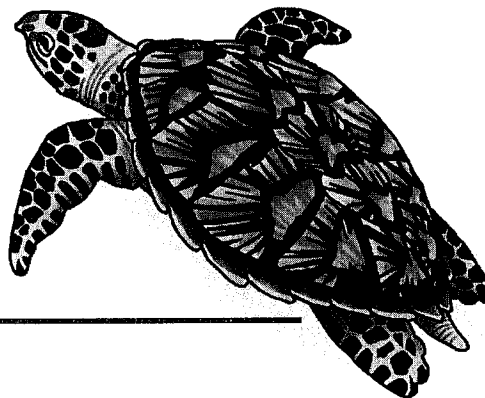
Solve the problem using multiplication or division. Write the number sentence.

5. Mr. Wong drives 6 miles to work and back each day. How many miles does he drive to and from work during a 5-day work week?

6. A box contains 56 beads. Seven friends want to make bead necklaces. If each friend uses the same number of beads, how many beads will each friend use?

7. Jenny has 36 dollars. She needs to buy 4 presents that each cost the same amount. How much money can she spend on each present?

8. A bakery has 8 pies. If each pie is cut into 6 slices, how many slices of pie does the bakery have?



Fill in the blanks.

9. $6 = 1 \times \underline{\quad}$ $6 = \underline{\quad} \times 3$

What are the factors of 6? $\underline{\quad}$, $\underline{\quad}$, $\underline{\quad}$, $\underline{\quad}$

Is 6 a prime number? $\underline{\quad}$

Place Value through Thousands

Mexico City's elevation is 7,579 feet above sea level.

7	5	7	9
thousands	hundreds	tens	ones

word name: seven thousand, five hundred seventy-nine

Write the correct digit in each blank.

1. Mexico City has more than **350** neighborhood districts.

thousands	hundreds	tens	ones

2. The longest river, the Rio Bravo, is **1,880** miles.

thousands	hundreds	tens	ones

3. Mexico's Air Force has more than **5,500** people.

thousands	hundreds	tens	ones

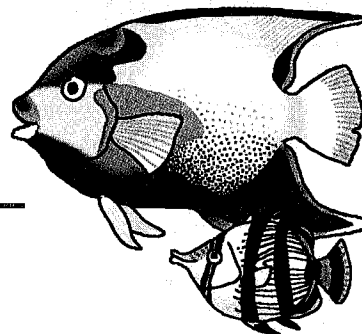
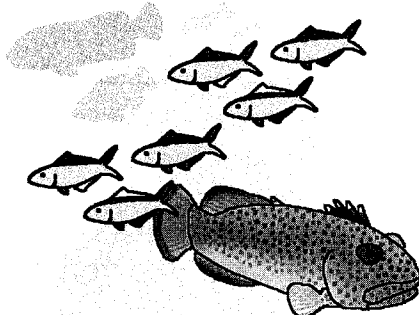
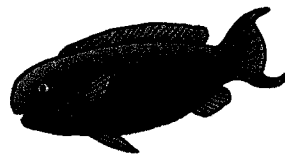
Write the number in standard form.

4. $7,000 + 400 + 30 + 2$

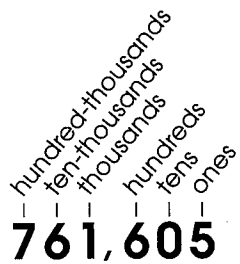
expanded form: $9,000 + 700 + 20 + 5$
 standard form: 9,725

5. $6,000 + 300 + 40 + 1$

6. $1,000 + 90 + 5$



Place Value through Hundred Thousands



The area of all the land in Mexico is **761,605** square miles.

expanded form: $700,000 + 60,000 + 1,000 + 600 + 5$

standard form: 761,605

word name: seven hundred sixty-one thousand, six hundred five

Write each number in standard form.

1. $50,000 + 7,000 + 200 + 60 + 9$ _____

2. $300,000 + 5,000 + 800 + 6$ _____

3. $700,000 + 40,000 + 50 + 3$ _____

Write each number in expanded form.

4. 34,562 _____

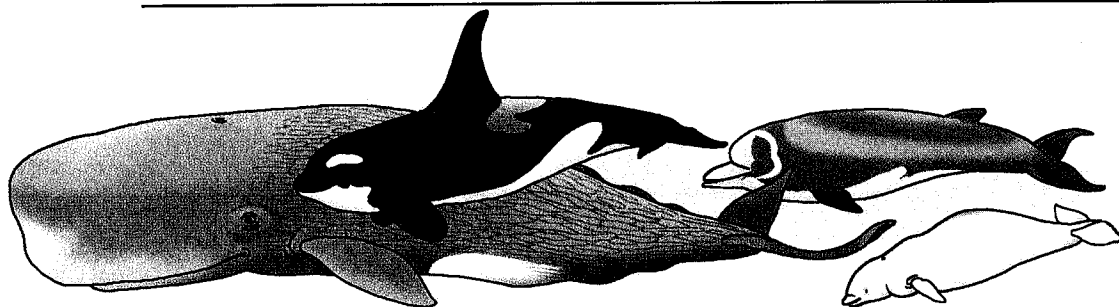
5. 621,700 _____

6. 403,087 _____

Write the word name for each number.

7. 35,621 _____

8. 246,809 _____



Place Value through Hundred Millions

hundred-millions
ten-millions
millions
hundred-thousands
ten-thousands
thousands
hundreds
tens
ones

100,350,000

Mexico has more than **100,350,000** people.

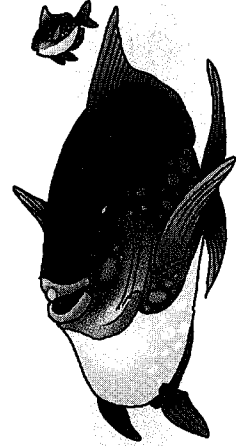
word name: one hundred million, three hundred fifty thousand

Write each number in standard form.

1. nine million, one hundred three thousand, two hundred five

2. four hundred thirty-three million, six hundred forty-seven thousand, one hundred twelve

3. seventeen million, two hundred twenty-one thousand, fifty



Write the place value of the **7** in each number.

4. 379,882,154 _____

5. 17,205,148 _____

6. 2,057,268 _____

7. 508,672,304 _____

8. 540,916,278 _____

9. 789,544,912 _____

Compare and Order Numbers

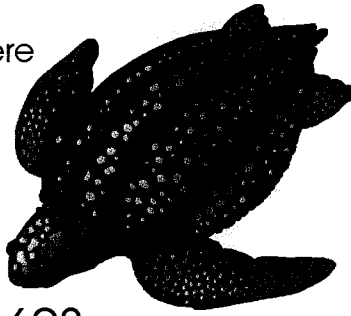
Compare **3,783** and **3,698**.

Begin at the left. Find the first place where the digits are different. Then compare.

3,783
3,698




7 hundreds > 6 hundreds **3,783 > 3,698**



> means greater than
< means less than
= means equal to

The sign points to the number that is less.

Compare the numbers. Write <, >, or = in the .

1. 687  593

2. 254  221

3. 8×8  6×10

4. 5,213  8,436

5. 3,333  3,491

6. $20 - 6$  2×7

7. 7,549  9,264

8. 9,054  9,268

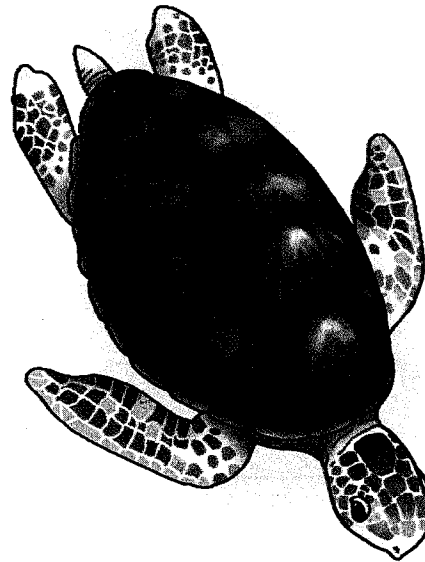
9. $10 + 9$  5×5

Write the numbers in order from least to greatest.

10. 149 822 324 287

11. 2,973 3,006 2,118 3,652

12. 4,431 2,840 4,931 2,821




Solve.

13. Three girls were in a race. Juanita ran 135 yards, Maria ran 460 yards, and Lucia ran 310 yards. Mark the distances on the number line. Then write the names of the girls on the blanks.



Compare and Order Greater Numbers

Compare the numbers. Write $<$, $>$, or $=$ in the .


1. 49,653  49,536

2. 756,281  765,182


3. 8,300,475  8,003,476

4. 27,853,654  37,358,456

5. 50,000  five hundred million

6. 65,798  sixty-five thousand, eight hundred

7. 4,030,070  four million, thirty thousand, seventy

8. 32,007,800  $30,000,000 + 800 + 7$

Order the numbers from least to greatest.

9. 20,000 22,000 20,200 20,202

10. 565,565 556,556 556,565 565,556

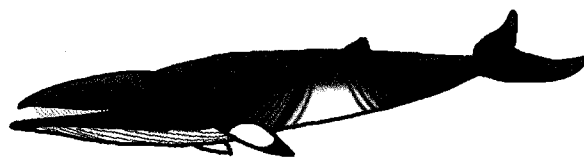
Order the numbers from greatest to least.

11. 30,300 30,030 33,003 33,030

12. 4,570,800 4,507,080 4,705,800 4,578,000

Solve.

13. What is the greatest six-digit number? _____



Round to the Nearest Ten or Hundred

To round numbers to the **nearest ten**, look at the **ones** place.

Round **583** to the nearest ten.
583 is between 580 and 590.

583 Look at the ones place.
If the number is less than 5 round down.

round down
583 rounds to **580**.

To round numbers to the **nearest hundred**, look at the **tens** place.

Round **583** to the nearest hundred.
583 is between 500 and 600.

583 Look at the tens place. If the number is 5 or greater, round up.

round up
583 rounds to **600**.

Round each number to the nearest ten.

1. 43 _____ 2. 85 _____ 3. 62 _____

4. 386 _____ 5. 251 _____ 6. 805 _____

7. 1,283 _____ 8. 4,065 _____ 9. 8,763 _____

Round each number to the nearest hundred.

10. 378 _____ 11. 542 _____ 12. 439 _____

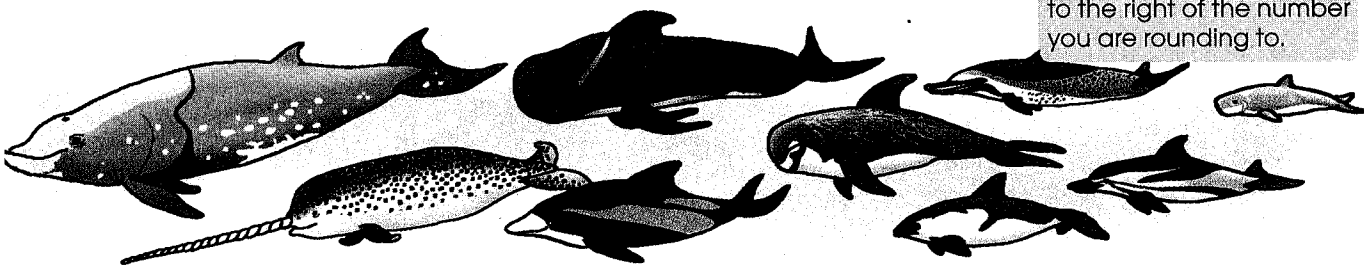
13. 1,894 _____ 14. 2,538 _____ 15. 7,509 _____

16. 109 _____ 17. 85 _____ 18. 47 _____

Round each amount of money to the nearest dollar.

19. \$1.79 _____ 20. \$8.35 _____ 21. \$27.55 _____

Hint: Look at the number to the right of the number you are rounding to.



Round to the Nearest Thousand

To round numbers to the **nearest thousand**, look at the **hundreds** place.

Round **4,506** to the nearest thousand.
4,506 is between 4,000 and 5,000.

Round **37,195** to the nearest thousand.
37,195 is between 37,000 and 38,000.

4,506 Look at the hundreds place.

37,195 Look at the hundreds place.

↑
round up
4,506 rounds to **5,000**.

↑
round down
37,195 rounds to **37,000**.

Round each number to the nearest thousand.

1. 3,468 _____ 2. 6,843 _____ 3. 7,540 _____

4. 15,033 _____ 5. 40,909 _____ 6. 29,895 _____

7. 942 _____ 8. 458 _____ 9. 99 _____

Mexico has many volcanoes. Some have erupted in recent years while others lay dormant. Round the height of each volcano to the nearest thousand.

10. Pico de Orizaba 18,555 _____ 11. Popocatepeti 17,390 _____

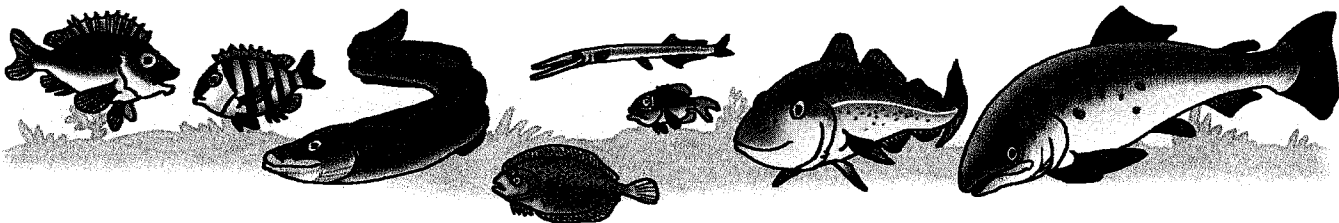
12. Collima 12,361 _____ 13. El Chichón 7,300 _____

The area of all the land in Mexico is **761,605** square miles.
Round the number to the nearest place given below.

14. ten _____ 15. hundred _____

16. thousand _____ 17. ten thousand _____

18. hundred thousand _____ 19. millions _____



Review Whole Numbers

Compare the numbers. Write $<$, $>$, or $=$ in the \bullet .

1. 362 \bullet 356

2. 6,137 \bullet 2,814

3. 9×6 \bullet 86

4. 6×6 \bullet 9×4

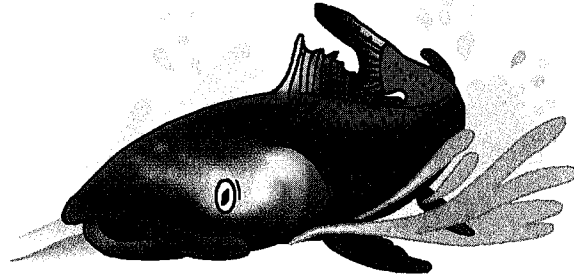
Write the numbers in order from least to greatest.

5. 3,859 3,921 3,666 2,901 505 3,877

Write the number in standard form.

6. one million, two hundred eleven thousand, five hundred one

7. sixty-two thousand, eighty-nine



Tell the place value of the **2** in each number.

8. **827** _____

9. **324,501** _____

Round to the nearest ten.

10. 46 _____

11. 132 _____

12. 91 _____

13. 98 _____

Round to the nearest hundred.

14. 620 _____

15. 1,890 _____

16. 87 _____

17. 7,888 _____

Round to the nearest thousand.

18. 54,890 _____

19. 809,114 _____

20. 905 _____

Partial Sum Addition

Add the **ones**.

$$\begin{array}{r} 346 \\ +582 \\ \hline 8 \end{array}$$

$$6 + 2 = 8$$

Add the **tens**.

$$\begin{array}{r} 346 \\ +582 \\ \hline 8 \\ 120 \end{array}$$

$$40 + 80 = 120$$

Add the **hundreds**.

$$\begin{array}{r} 346 \\ +582 \\ \hline 8 \\ 120 \\ +800 \\ \hline \end{array}$$

$$300 + 500 = 800$$

Add the **partial sums**.

$$\begin{array}{r} 346 \\ +582 \\ \hline 8 \\ 120 \\ +800 \\ \hline \end{array}$$

$$928 \leftarrow \text{sum}$$

Find the sum.

1.
$$\begin{array}{r} 68 \\ +13 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 23 \\ +58 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 35 \\ +19 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 47 \\ +26 \\ \hline \end{array}$$

5.
$$\begin{array}{r} 654 \\ +138 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 321 \\ +581 \\ \hline \end{array}$$

7.
$$\begin{array}{r} 841 \\ +109 \\ \hline \end{array}$$

8.
$$\begin{array}{r} 924 \\ +39 \\ \hline \end{array}$$

9.
$$\begin{array}{r} 3,407 \\ +1,225 \\ \hline \end{array}$$

10.
$$\begin{array}{r} 6,295 \\ +2,063 \\ \hline \end{array}$$

11.
$$\begin{array}{r} 2,457 \\ +3,831 \\ \hline \end{array}$$

12.
$$\begin{array}{r} 8,536 \\ +1,092 \\ \hline \end{array}$$

Write and solve an equation for each problem.

13. The boys' soccer team practiced for 45 minutes on Monday and 45 minutes on Wednesday. How many minutes did they practice in all?
- _____

14. There were 365 red apples and 283 green apples at the market. How many apples were there in all?
- _____

More Partial Sum Addition

Add the **ones**.

$$\begin{array}{r} 3,754 \\ + 1,837 \\ \hline 11 \end{array}$$

Add the **tens**.

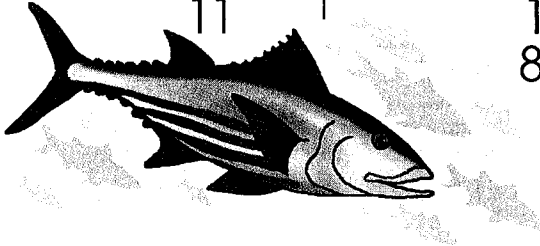
$$\begin{array}{r} 3,754 \\ + 1,837 \\ \hline 11 \\ 80 \end{array}$$

Add the **hundreds**.

$$\begin{array}{r} 3,754 \\ + 1,837 \\ \hline 11 \\ 80 \\ 1,500 \end{array}$$

Add the **thousands**.

$$\begin{array}{r} 3,754 \\ + 1,837 \\ \hline 11 \\ 80 \\ 1,500 \\ + 4,000 \\ \hline 5,591 \end{array} \leftarrow \text{sum}$$



Find the sum.

1.
$$\begin{array}{r} 368 \\ + 593 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 593 \\ + 668 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 297 \\ + 493 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 386 \\ + 857 \\ \hline \end{array}$$

5.
$$\begin{array}{r} 3,333 \\ + 777 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 9,054 \\ + 857 \\ \hline \end{array}$$

7.
$$\begin{array}{r} 3,289 \\ + 1,931 \\ \hline \end{array}$$

8.
$$\begin{array}{r} 8,721 \\ + 1,189 \\ \hline \end{array}$$

Write and solve an equation for each problem.

9. Miguel is a mousetrap maker. Once, he made 563 mousetraps out of bubble gum. He made another 447 mousetraps out of doorknobs. How many mousetraps did he make in all?

10. Luis spends all day thinking. One day, he thought of 1,599 funny jokes to tell his friends. His friend Pedro thought of 2,735 very funny jokes to tell. How many jokes did their friends hear?

Add Three Numbers

When adding more than two numbers, look for sums of ten in each column to help you.

Add the **ones**.

$$\begin{array}{r} 51 \\ 3,436 \\ + 359 \\ \hline 16 \end{array}$$

Look for sums of 10.
 $1 + 9 = 10$

Add the **tens**.

$$\begin{array}{r} 51 \\ 3,436 \\ + 359 \\ \hline 16 \\ 130 \end{array}$$

Look for sums of 10.
 $5 + 5 = 10$

Add the **hundreds**.

$$\begin{array}{r} 51 \\ 3,436 \\ + 359 \\ \hline 16 \\ 130 \\ 700 \end{array}$$

Add the **thousands**.

$$\begin{array}{r} 51 \\ 3,436 \\ + 359 \\ \hline 16 \\ 130 \\ 700 \\ + 3,000 \\ \hline 3,846 \leftarrow \text{sum} \end{array}$$

Find the sum.

1.
$$\begin{array}{r} 12 \\ 6 \\ + 94 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 70 \\ 19 \\ + 31 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 4 \\ 59 \\ + 46 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 325 \\ 163 \\ + 785 \\ \hline \end{array}$$

5.
$$\begin{array}{r} 105 \\ 347 \\ + 55 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 392 \\ 47 \\ + 741 \\ \hline \end{array}$$

7.
$$\begin{array}{r} 3,162 \\ 6,392 \\ + 4,818 \\ \hline \end{array}$$

8.
$$\begin{array}{r} 1,322 \\ 411 \\ + 78 \\ \hline \end{array}$$

Rewrite as a vertical problem. Find the sum.

9. $46 + 127 + 34$

10. $502 + 88 + 9$

11. $456 + 2,453 + 78$

Write and solve an equation for the problem.

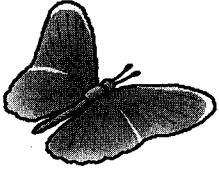
12. Melinda loves to read. First, she read a book about Mexico with 250 pages. Then, she read a joke book with 97 pages. Last, she read a poetry book with 453 pages. How many pages did she read?

Subtract with One Regrouping

Subtract the **ones**.

$$\begin{array}{r} 856 \\ -582 \\ \hline 4 \end{array}$$

$6 - 2 = 4$ ones



Subtract the **tens**.
Regroup.

$$\begin{array}{r} 7 \text{ } 15 \\ 8\cancel{5}6 \\ -582 \\ \hline 74 \end{array}$$

$5 - 8 = ?$ **Regroup**
8 hundreds 5 tens to
7 hundreds 15 tens.
 $15 - 8 = 7$ tens

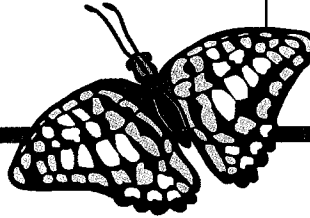
Subtract the **hundreds**.

$$\begin{array}{r} 7 \text{ } 15 \\ 8\cancel{5}6 \\ -582 \\ \hline 274 \end{array}$$

$7 - 5 = 2$ hundreds
The difference is **274**.

Check:

$$\begin{array}{r} 582 \\ +274 \\ \hline 6 \\ 150 \\ +700 \\ \hline 856 \end{array}$$



Find the difference. Check your answer.

1.
$$\begin{array}{r} 65 \\ -48 \\ \hline \end{array}$$

Check:
+ _____

2.
$$\begin{array}{r} 92 \\ -56 \\ \hline \end{array}$$

Check:
+ _____

3.
$$\begin{array}{r} 43 \\ -37 \\ \hline \end{array}$$

Check:
+ _____

4.
$$\begin{array}{r} 845 \\ -391 \\ \hline \end{array}$$

Check:
+ _____

5.
$$\begin{array}{r} 788 \\ -259 \\ \hline \end{array}$$

Check:
+ _____

6.
$$\begin{array}{r} 555 \\ -175 \\ \hline \end{array}$$

Check:
+ _____

7.
$$\begin{array}{r} 75 \\ -49 \\ \hline \end{array}$$

Check:
+ _____

8.
$$\begin{array}{r} 91 \\ -56 \\ \hline \end{array}$$

Check:
+ _____

9.
$$\begin{array}{r} 584 \\ -352 \\ \hline \end{array}$$

Check:
+ _____

Write and solve an equation for each problem.

10. Laura bought 2 yards of ribbon. She cut off a piece of ribbon that is 58 inches long to wrap a package. How much ribbon does she have left? (1 yard = 36 inches)

11. Juan's book about Mexico has 456 pages. He has already read 182 pages. How many more pages does he have to read?

Subtract Greater Numbers

Subtract the **ones**.

$$\begin{array}{r} 2 \ 14 \\ 234 \\ - 148 \\ \hline 6 \end{array}$$

4 - 8 = ? **Regroup**
3 tens and 4 ones
to 2 tens and 14
ones.

Subtract the **tens**.

$$\begin{array}{r} 1 \ 12 \\ 2 \ 14 \\ 234 \\ - 148 \\ \hline 86 \end{array}$$

2 - 4 = ? **Regroup**
2 hundreds and 2
tens to 1 hundred
and 12 tens.

Subtract the **hundreds**.

$$\begin{array}{r} 1 \ 12 \\ 2 \ 14 \\ 234 \\ - 148 \\ \hline 86 \end{array}$$

1 - 1 = 0, but do not
write a leading zero
in a whole number.

Find the difference.

1.
$$\begin{array}{r} 736 \\ - 349 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 8,127 \\ - 675 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 7,194 \\ - 1,856 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 340 \\ - 93 \\ \hline \end{array}$$

5.
$$\begin{array}{r} 6,354 \\ - 5,888 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 3,447 \\ - 1,299 \\ \hline \end{array}$$

7.
$$\begin{array}{r} 4,253 \\ - 2,444 \\ \hline \end{array}$$

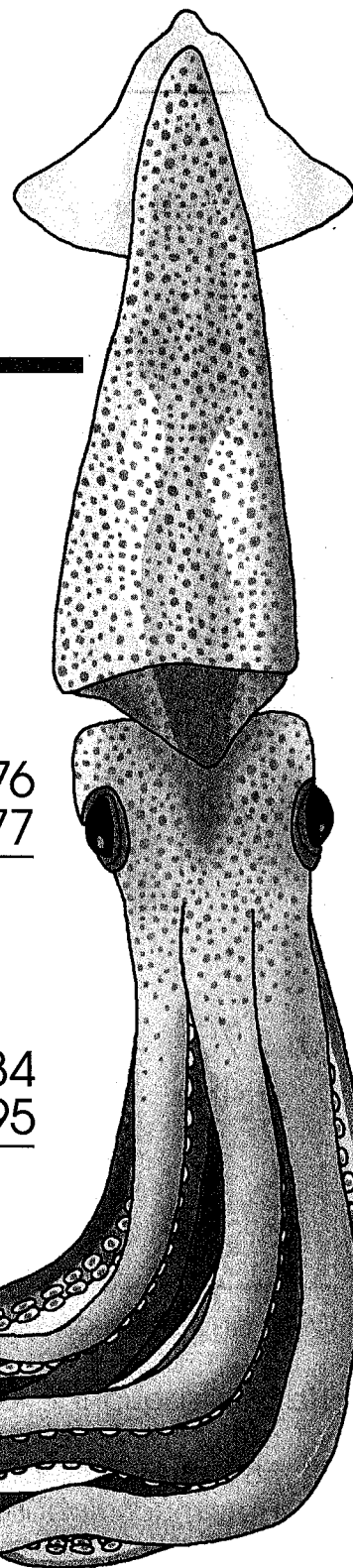
8.
$$\begin{array}{r} 9,876 \\ - 3,877 \\ \hline \end{array}$$

9.
$$\begin{array}{r} 1,623 \\ - 766 \\ \hline \end{array}$$

10.
$$\begin{array}{r} 7,561 \\ - 2,654 \\ \hline \end{array}$$

11.
$$\begin{array}{r} 6,276 \\ - 559 \\ \hline \end{array}$$

12.
$$\begin{array}{r} 1,784 \\ - 795 \\ \hline \end{array}$$



Subtract with Zeros

Subtract the **ones**.

$$\begin{array}{r} 5,500 \\ - 2,376 \\ \hline ? \end{array}$$

Since there are no tens to regroup, regroup the hundreds.

Regroup the hundreds to **show more tens**.

$$\begin{array}{r} 4 \text{ } 10 \\ 5,500 \\ - 2,376 \\ \hline ? \end{array}$$

You still need more ones to subtract. Regroup the tens.

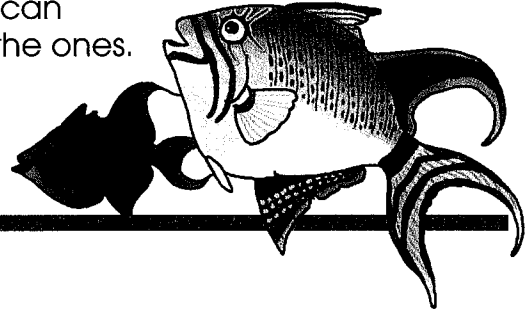
Regroup the tens to **show more ones**.

$$\begin{array}{r} 9 \text{ } 10 \\ 4 \text{ } 10 \\ 5,500 \\ - 2,376 \\ \hline 4 \end{array}$$

Now you can subtract the ones.
 $10 - 6 = 4$

Finish the subtracting.

$$\begin{array}{r} 9 \text{ } 10 \\ 4 \text{ } 10 \\ 5,500 \\ - 2,376 \\ \hline 3,124 \end{array}$$



Regroup to show more ones.

1. 602

2. 400

3. $7,005$

4. $4,000$

Find the difference.

5. $\begin{array}{r} 204 \\ - 117 \\ \hline \end{array}$

6. $\begin{array}{r} 408 \\ - 29 \\ \hline \end{array}$

7. $\begin{array}{r} 800 \\ - 529 \\ \hline \end{array}$

8. $\begin{array}{r} 503 \\ - 56 \\ \hline \end{array}$

9. $\begin{array}{r} 6,700 \\ - 5,379 \\ \hline \end{array}$

10. $\begin{array}{r} 7,020 \\ - 443 \\ \hline \end{array}$

11. $\begin{array}{r} 5,002 \\ - 661 \\ \hline \end{array}$

12. $\begin{array}{r} 6,000 \\ - 1,278 \\ \hline \end{array}$

Write and solve an equation for the problem.

13. In 1521, Hernando Cortes conquered Mexico for the country of Spain. In the year 1810, Miguel Hidalgo y Costilla fought for Mexico's freedom from Spain. How many years did Spain rule Mexico before Mexico began to fight for its freedom?

Add, Subtract, and Compare

To discover one of the best known Indian civilizations in Mexico, solve each problem. Then fill in the blanks with the correct letters.

1. $442 \rightarrow$ _____

$$\begin{array}{r} + 316 \rightarrow \\ \hline ? \end{array}$$

Round each number to the nearest ten. Estimate the sum.

If your answer is greater than **750**, put an **A** in the blank.
If your answer is less than **750**, put a **P** in the blank.

2. 648
 $+ 237$

Add to find the sum.

If your answer is greater than **880**, put a **Z** in the blank.
If your answer is less than **880**, put a **G** in the blank.

3. $5,639$
 $+ 1,374$

Add to find the sum.

If your answer is greater than **7,100**, put an **S** in the blank.
If your answer is less than **7,100**, put a **T** in the blank.

4. 392
 400
 68
 $+ 715$

Add to find the sum.

If your answer is greater than **1,500**, put an **E** in the blank.
If your answer is less than **1,500**, put an **O** in the blank.

5. 37

Regroup the number to show more ones.

If your answer is **3 tens** and **17 ones**, put a **B** in the blank.
If your answer is **2 tens** and **17 ones**, put a **C** in the blank.

6. $4,205$
 $- 1,876$

Subtract to find the difference.

If your answer is greater than **2,500**, put a **D** in the blank.
If your answer is less than **2,500**, put an **S** in the blank.

1

2

3

4

5

6

Add, Subtract, and Review

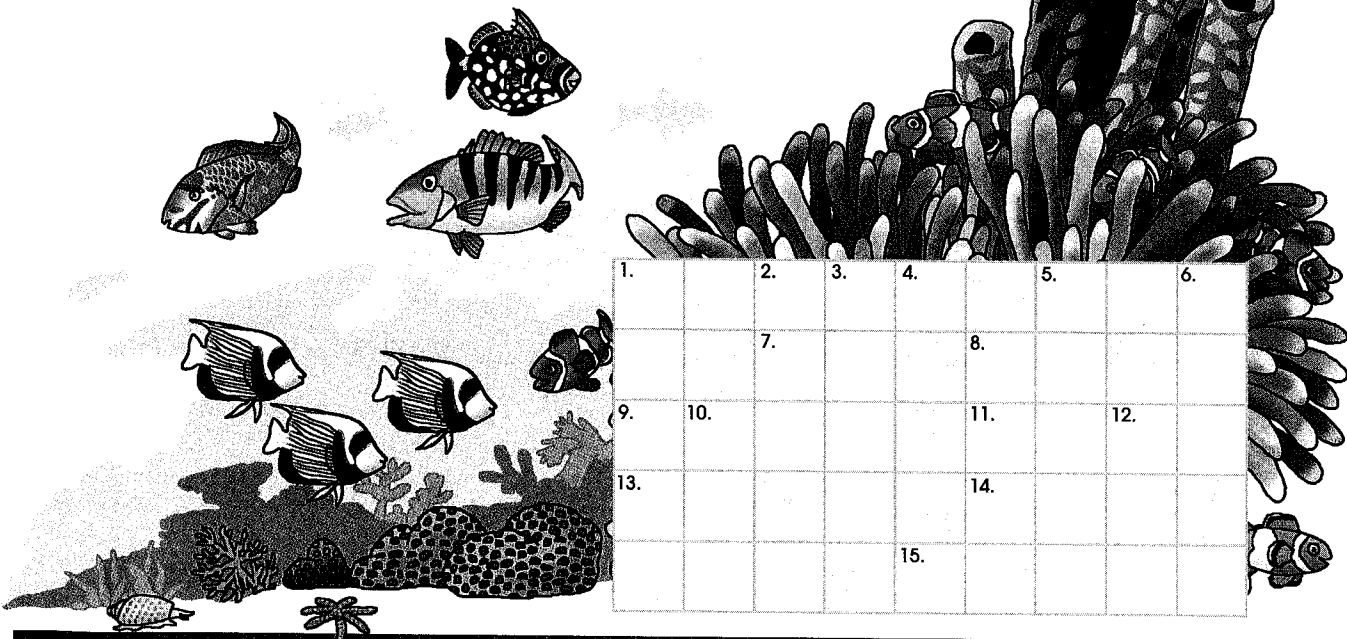
Use the clues to fill in the puzzle.

Across

1. $50,000 + 300 + 70 + 5$
5. $794 - 258$
7. $403 - 319$
8. $5,821 - \underline{\quad} = 5,725$
9. 1,375 to the nearest hundred
11. $9,000 - 1,281$
13. $372 + \underline{\quad} = 450$
14. $1,000 - 729$
15. sixty-one thousand,
three hundred eight

Down

1. five thousand, seventeen
2. 375 to the nearest ten
3. 7,429 to the nearest hundred
4. $63 = \underline{\quad}$ ten and 13 ones
5. $44,428 + 12,345$
6. $483 + 37 + 109$
8. $4,755 + 4,966$
10. $400 + 6 + 80$
12. $789 - 679$



Multiply with Multiples of Ten

You can use mental math to multiply with tens and multiples of ten. Recall the multiplication basic facts and how to multiply by tens.

Remember:
 $5 \times 3 = 15$
↑ ↑ ↑
factor factor product

Example 1:

Look at the pattern for multiplying by tens.

$$\begin{aligned}5 \times 10 &= 50 \\5 \times 100 &= 500 \\5 \times 1,000 &= 5,000\end{aligned}$$

Notice that the product has the same number of zeros as the number of zeros in the factor with zeros.

Example 2:

What is 5×30 ?

$$\begin{aligned}5 \times 30 &= \underbrace{5 \times 3}_{\text{basic fact}} \times 10 \\ &= 15 \times 10 = 150\end{aligned}$$

Now look at these:

$$\begin{aligned}5 \times 300 &= 5 \times 3 \times 100 = 1,500 \\50 \times 30 &= \underbrace{5 \times 10}_{15} \times \underbrace{3 \times 10}_{30} \\ &= 15 \times 100 = 1,500\end{aligned}$$

Example 3:

What is $9 \times 8 \times 5$?

Sometimes you can find two factors that have a product that is a multiple of ten.

$$\begin{aligned}9 \times 8 \times 5 &= \\ \downarrow \quad \downarrow & \\ \underbrace{9 \times 40}_{36 \times 10} &= \\ 36 \times 10 &= 360\end{aligned}$$

Find the product.

1. $10 \times 6 =$ _____ 2. $49 \times 100 =$ _____ 3. $1,000 \times 8 =$ _____

4. $10 \times 10 =$ _____ 5. $10 \times 100 =$ _____ 6. $100 \times 100 =$ _____

7. $7 \times 20 =$ _____ 8. $300 \times 6 =$ _____ 9. $6 \times 2,000 =$ _____

10. $80 \times 5 =$ _____ 11. $20 \times 80 =$ _____ 12. $70 \times 70 =$ _____

13. $900 \times 20 =$ _____ 14. $500 \times 60 =$ _____ 15. $7,000 \times 80 =$ _____

16. $6 \times 10 \times 10 =$ _____ 17. $2 \times 5 \times 8 =$ _____ 18. $4 \times 7 \times 5 =$ _____

19. $6 \times 6 \times 5 =$ _____ 20. $8 \times 9 \times 5 =$ _____ 21. $4 \times 10 \times 0 =$ _____

Multiply Multi-Digit Numbers

Multiply the **ones**.

$$\begin{array}{r} 415 \\ \times \quad 3 \\ \hline 15 \end{array}$$

$$3 \times 5 = 15$$

Multiply the **tens**.

$$\begin{array}{r} 415 \\ \times \quad 3 \\ \hline 15 \\ 30 \end{array}$$

$$3 \times 10 = 30$$

Multiply the **hundreds**.

$$\begin{array}{r} 415 \\ \times \quad 3 \\ \hline 15 \\ 30 \\ 1,200 \end{array}$$

$$3 \times 400 = 1,200$$

Add.

$$\begin{array}{r} 415 \\ \times \quad 3 \\ \hline 15 \\ 30 \\ + 1,200 \\ \hline 1,245 \end{array}$$

Find the product.

1.
$$\begin{array}{r} 58 \\ \times 4 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 17 \\ \times 6 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 73 \\ \times 8 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 46 \\ \times 9 \\ \hline \end{array}$$

5.
$$\begin{array}{r} 92 \\ \times 7 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 272 \\ \times 3 \\ \hline \end{array}$$

7.
$$\begin{array}{r} 971 \\ \times 7 \\ \hline \end{array}$$

8.
$$\begin{array}{r} 381 \\ \times 2 \\ \hline \end{array}$$

9.
$$\begin{array}{r} 812 \\ \times 4 \\ \hline \end{array}$$

10.
$$\begin{array}{r} 619 \\ \times 8 \\ \hline \end{array}$$

11.
$$\begin{array}{r} 1,522 \\ \times 3 \\ \hline \end{array}$$

12.
$$\begin{array}{r} 4,314 \\ \times 2 \\ \hline \end{array}$$

13.
$$\begin{array}{r} 9,171 \\ \times 6 \\ \hline \end{array}$$

14.
$$\begin{array}{r} 3,115 \\ \times 8 \\ \hline \end{array}$$

15.
$$\begin{array}{r} 4,123 \\ \times 9 \\ \hline \end{array}$$

Write and solve an equation for each problem.

16. There are 24 hours in a day. There are 7 days in one week. How many hours are in one week?

17. It is 472 miles between Houston, Texas and Mobile, Alabama. How many miles is a round trip?

Multiply Multi-Digit Numbers

Multiply the **ones**.

$$\begin{array}{r} 364 \\ \times \quad 4 \\ \hline 16 \end{array}$$

$$4 \times 4 = 16$$

Multiply the **tens**.

$$\begin{array}{r} 364 \\ \times \quad 4 \\ \hline 16 \\ 240 \end{array}$$

$$4 \times 60 = 240$$

Multiply the **hundreds**.

$$\begin{array}{r} 364 \\ \times \quad 4 \\ \hline 16 \\ 240 \\ 1,200 \end{array}$$

$$4 \times 300 = 1,200$$

Add.

$$\begin{array}{r} 364 \\ \times \quad 4 \\ \hline 16 \\ 240 \\ + 1,200 \\ \hline 1,456 \end{array}$$

Find the product.

1.
$$\begin{array}{r} 24 \\ \times 2 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 91 \\ \times 8 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 62 \\ \times 4 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 71 \\ \times 3 \\ \hline \end{array}$$

5.
$$\begin{array}{r} 511 \\ \times 7 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 813 \\ \times 3 \\ \hline \end{array}$$

7.
$$\begin{array}{r} 412 \\ \times 4 \\ \hline \end{array}$$

8.
$$\begin{array}{r} 732 \\ \times 3 \\ \hline \end{array}$$

9.
$$\begin{array}{r} 7,312 \\ \times \quad 2 \\ \hline \end{array}$$

10.
$$\begin{array}{r} 5,132 \\ \times \quad 3 \\ \hline \end{array}$$

11.
$$\begin{array}{r} 9,141 \\ \times \quad 2 \\ \hline \end{array}$$

12.
$$\begin{array}{r} 6,222 \\ \times \quad 4 \\ \hline \end{array}$$

Write and solve an equation for each problem.

13. Enrico had 4 hoses. Each hose was 42 feet long. How long were they when he hooked them all together?

14. The average number of people living in one house in Mexico is 6. In a small village, there are about 410 houses. How many people are living in the small village?

Multiply with Zeros

Multiply the **ones**.
Regroup as needed.

$$\begin{array}{r} ^2 504 \\ \times 6 \\ \hline 4 \end{array}$$

6 x 4 ones = **24 ones**
24 ones = **2 tens and 4 ones**

Multiply the **tens**.
Regroup as needed.

$$\begin{array}{r} ^2 504 \\ \times 6 \\ \hline 24 \end{array}$$

6 x 0 tens = **0 tens**
0 tens + 2 tens = **2 tens**

Multiply the **hundreds**.

$$\begin{array}{r} ^2 504 \\ \times 6 \\ \hline 3,024 \end{array}$$

6 x 5 hundreds = **30 hundreds**

Find the product.

1.
$$\begin{array}{r} 560 \\ \times 5 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 601 \\ \times 8 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 302 \\ \times 5 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 809 \\ \times 3 \\ \hline \end{array}$$

5.
$$\begin{array}{r} 2,002 \\ \times 7 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 7,050 \\ \times 4 \\ \hline \end{array}$$

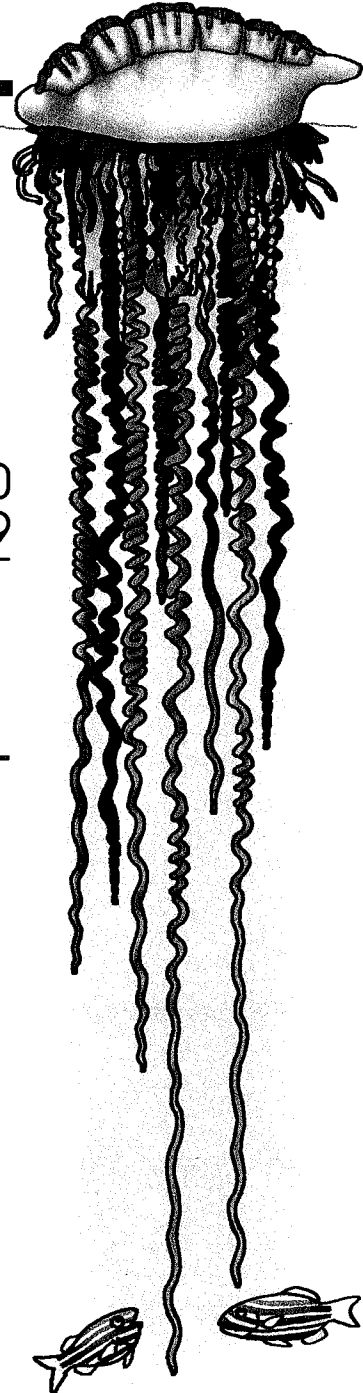
7.
$$\begin{array}{r} 8,007 \\ \times 2 \\ \hline \end{array}$$

8.
$$\begin{array}{r} 5,060 \\ \times 9 \\ \hline \end{array}$$

Write and solve an equation for each problem.

9. Many Mexican craft workers make beautiful pottery and glassware, which they sell to tourists. If some tourists bought 8 pieces of pottery, and each piece sold for \$205, how much money would the craft worker make?
- _____

10. The distance from Mexico City to Córdoba is about 170 miles. If a person made this trip 5 times, how many miles would he or she travel?
- _____



Multiplication Review

Multiply. Use your answers to fill in the blanks with the correct letters.

O
 $220 \times 3 =$

R
 $604 \times 5 =$

E
 $165 \times 5 =$

S
 $1,416 \times 4 =$

H
 $1,302 \times 5 =$

R
 $431 \times 6 =$

R
 $678 \times 9 =$

E
 $444 \times 6 =$

I
 $460 \times 7 =$

S
 $555 \times 7 =$

T
 $888 \times 6 =$

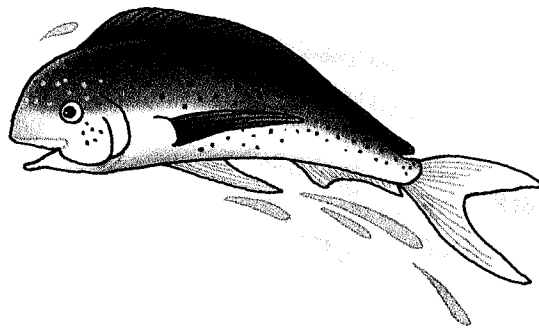
I
 $132 \times 6 =$

M
 $755 \times 5 =$

V
 $840 \times 3 =$

U
 $920 \times 4 =$

I
 $7,090 \times 2 =$



What is the longest river in the United States?

5,328 6,510 825 3,775 792 5,664 3,885 660 3,680 2,586 3,220

6,102 14,180 2,520 2,664 3,020

Multiply by Two-Digit Numbers

Multiply the **ones** by the **ones digit** of the multiplier.

$$\begin{array}{r} 56 \\ \times 23 \\ \hline 18 \end{array}$$

$$3 \times 6 = 18$$

Multiply the **tens** by the **ones digit** of the multiplier.

$$\begin{array}{r} 56 \\ \times 23 \\ \hline 18 \\ 150 \end{array}$$

$$3 \times 50 = 150$$

Multiply the **ones** by the **tens digit** of the multiplier.

$$\begin{array}{r} 56 \\ \times 23 \\ \hline 18 \\ 150 \\ 120 \end{array}$$

$$20 \times 6 = 120$$

Multiply the **tens** by the **tens digit** of the multiplier. Then add.

$$\begin{array}{r} 56 \\ \times 23 \\ \hline 18 \\ 150 \\ 120 \\ + 1,000 \\ \hline 1,288 \end{array}$$

$$20 \times 50 = 1,000$$

Find the product.

1.
$$\begin{array}{r} 26 \\ \times 13 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 95 \\ \times 48 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 71 \\ \times 32 \\ \hline \end{array}$$

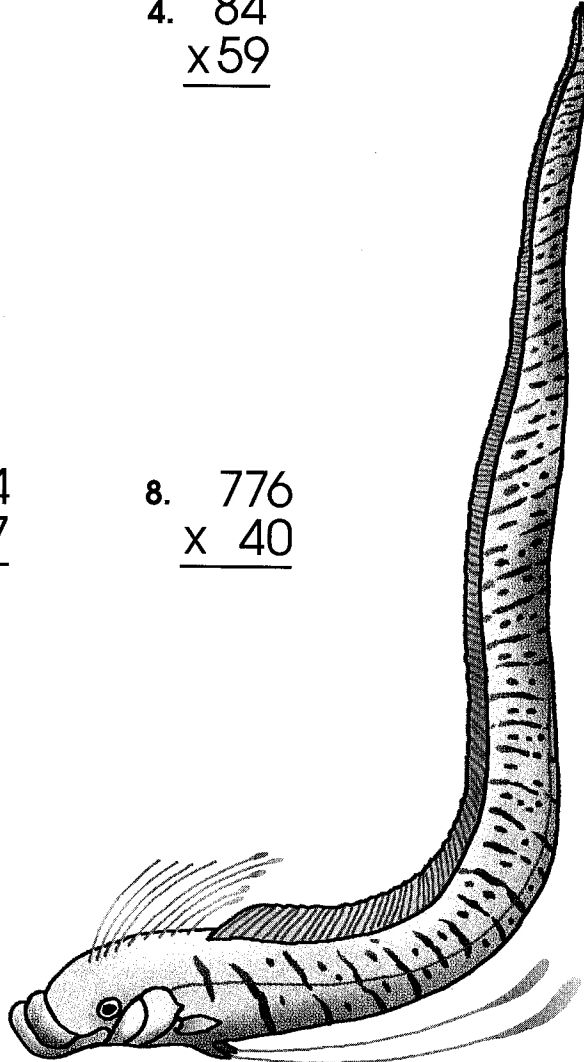
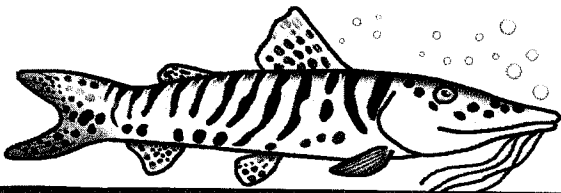
4.
$$\begin{array}{r} 84 \\ \times 59 \\ \hline \end{array}$$

5.
$$\begin{array}{r} 332 \\ \times 18 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 816 \\ \times 36 \\ \hline \end{array}$$

7.
$$\begin{array}{r} 194 \\ \times 27 \\ \hline \end{array}$$

8.
$$\begin{array}{r} 776 \\ \times 40 \\ \hline \end{array}$$



Multiply by Two-Digit Numbers

Find the product.

1.
$$\begin{array}{r} 38 \\ \times 25 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 43 \\ \times 70 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 78 \\ \times 78 \\ \hline \end{array}$$

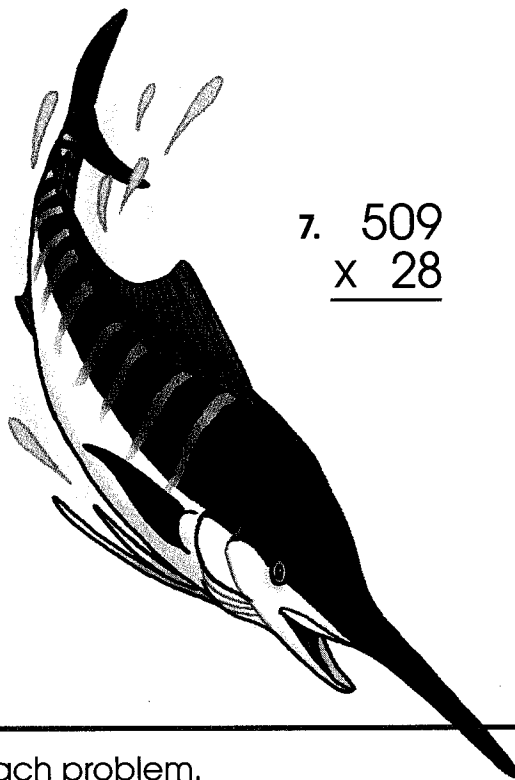
4.
$$\begin{array}{r} 90 \\ \times 67 \\ \hline \end{array}$$

5.
$$\begin{array}{r} 246 \\ \times 32 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 456 \\ \times 30 \\ \hline \end{array}$$

7.
$$\begin{array}{r} 509 \\ \times 28 \\ \hline \end{array}$$

8.
$$\begin{array}{r} 430 \\ \times 89 \\ \hline \end{array}$$



Write and solve an equation for each problem.

9. There are 32 seats in each row in a theater. If there are 24 rows of seats, how many seats are in the theater?

10. There are 12 inches in 1 foot. How many inches are in 35 feet?

11. There are 60 minutes in an hour. How many minutes are in a 24-hour day?

12. A farmer can store 20 dozen eggs on each shelf of a giant refrigerator. There are 3 shelves. How many eggs can be stored in the refrigerator?

Add, Subtract, and Multiply

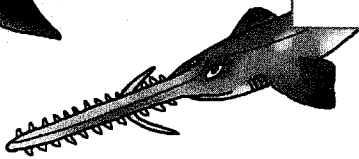
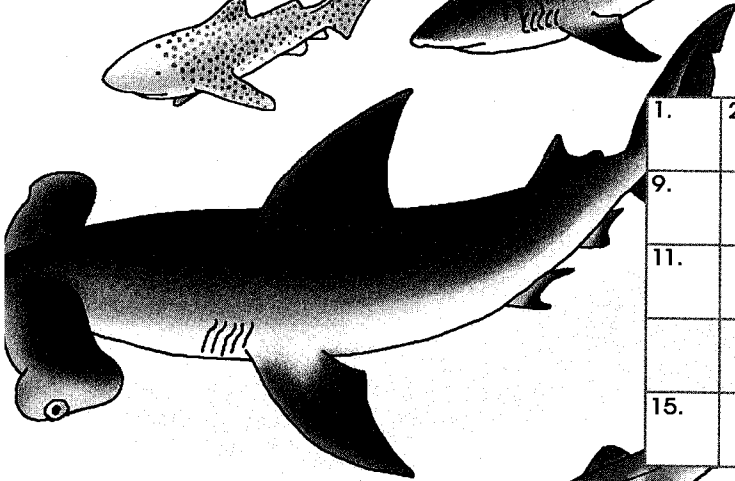
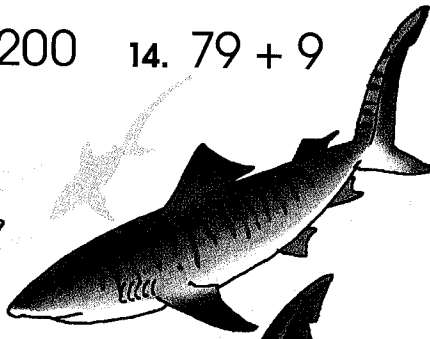
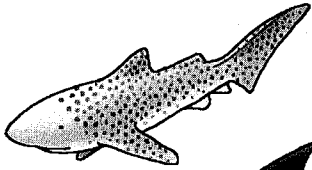
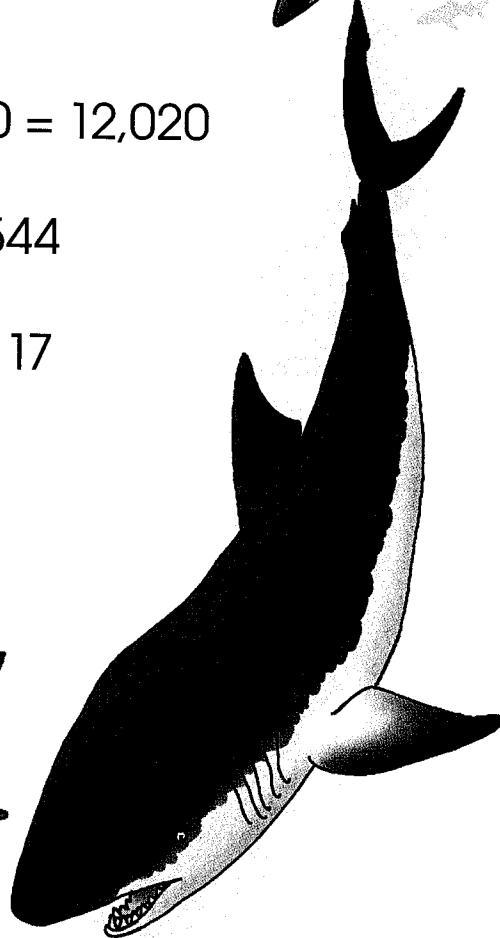
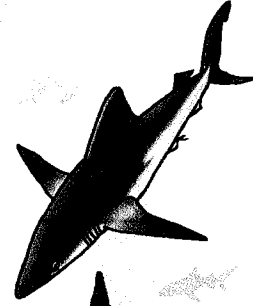
Use the clues to fill in the puzzle.

Across

1. 8×67
4. 153×84
9. 150×5
10. $8,696 - 4,567$
11. $299 + 202$
12. 317×3
13. 3×202
14. _____ $\times 90 = 7,200$
15. $4,876 + 9,321$

Down

1. $238 + 337$
2. 50×7
3. _____ $\times 20 = 12,020$
5. $9,000 - 6,544$
6. $747 + 47 + 17$
7. $527 - 475$
8. 59×50
14. $79 + 9$



1.	2.	3.		4.	5.	6.	7.	8.
9.					10.			
11.				12.				
			13.				14.	
15.								

Division with Remainders

Divide.

$$\begin{array}{r} 8 \\ 5 \overline{)42} \end{array}$$

Think of a division basic fact close to the problem.
 $5 \overline{)40} = 8$

Multiply.

$$\begin{array}{r} 8 \\ 5 \overline{)42} \\ \underline{40} \end{array}$$

$$5 \times 8 = 40$$

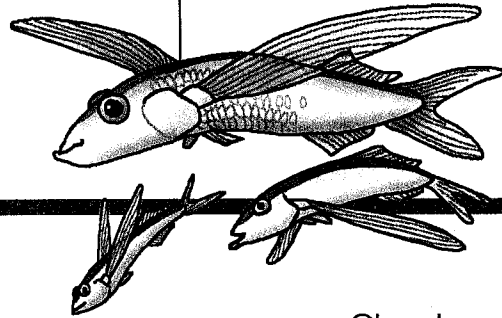
Subtract and compare.

$$\begin{array}{r} 8 \\ 5 \overline{)42} \\ \underline{-40} \\ 2 \end{array} \quad \begin{array}{r} \text{divisor} \quad \text{quotient} \quad \text{remainder} \\ \downarrow \quad \downarrow \quad \downarrow \\ 8 \quad 8 \quad R2 \\ 5 \overline{)42} \\ \underline{-40} \\ 2 \end{array}$$

$42 - 40 = 2$ The answer is 8 R2.
 $2 < 5$
 The remainder is less than the divisor.

Check:

$$\begin{array}{r} 8 \leftarrow \text{quotient} \\ \times 5 \leftarrow \text{divisor} \\ \hline 40 \\ + 2 \leftarrow \text{remainder} \\ \hline 42 \leftarrow \text{dividend} \end{array}$$



Find the quotient and remainder. Check your answer.

1. $5 \overline{)19}$

Check:

$$\begin{array}{r} X \\ \hline \end{array}$$

$$\begin{array}{r} + \\ \hline \end{array}$$

2. $9 \overline{)46}$

Check:

$$\begin{array}{r} X \\ \hline \end{array}$$

$$\begin{array}{r} + \\ \hline \end{array}$$

3. $6 \overline{)8}$

Check:

$$\begin{array}{r} X \\ \hline \end{array}$$

$$\begin{array}{r} + \\ \hline \end{array}$$

4. $3 \overline{)22}$

Check:

$$\begin{array}{r} X \\ \hline \end{array}$$

$$\begin{array}{r} + \\ \hline \end{array}$$

5. $8 \overline{)71}$

Check:

$$\begin{array}{r} X \\ \hline \end{array}$$

$$\begin{array}{r} + \\ \hline \end{array}$$

6. $7 \overline{)39}$

Check:

$$\begin{array}{r} X \\ \hline \end{array}$$

$$\begin{array}{r} + \\ \hline \end{array}$$

7. $4 \overline{)35}$

Check:

$$\begin{array}{r} X \\ \hline \end{array}$$

$$\begin{array}{r} + \\ \hline \end{array}$$

8. $9 \overline{)70}$

Check:

$$\begin{array}{r} X \\ \hline \end{array}$$

$$\begin{array}{r} + \\ \hline \end{array}$$

9. $8 \overline{)53}$

Check:

$$\begin{array}{r} X \\ \hline \end{array}$$

$$\begin{array}{r} + \\ \hline \end{array}$$

Two-Digit Quotients

Estimate.

$$\begin{array}{r} 20 \\ 4 \overline{)95} \end{array}$$

Think:
 $4 \overline{)8} = 2$
 So, $4 \overline{)80} = 20$

Making an estimate can help you place the first digit in the quotient.

Divide the tens.

$$\begin{array}{r} 2 \\ 4 \overline{)95} \\ -8 \\ \hline 1 \end{array}$$

Divide: $4 \overline{)9}$
 Multiply: $4 \times 2 = 8$
 Subtract: $9 - 8 = 1$
 Compare: $1 < 4$

Bring down the ones.
 Repeat the steps to finish the dividing.

$$\begin{array}{r} 23 \\ 4 \overline{)95} \\ -8 \\ \hline 15 \\ -12 \\ \hline 3 \end{array}$$

Divide: $4 \overline{)15}$
 Multiply: $4 \times 3 = 12$
 Subtract: $15 - 12 = 3$
 Compare: $3 < 4$
 The remainder is 3.
 The answer is 23 R3.

Check:

$$\begin{array}{r} 23 \\ \times 4 \\ \hline 92 \\ + 3 \\ \hline 95 \end{array}$$

Remember these steps:

1. Divide
2. Multiply
3. Subtract
4. Compare
5. Bring down

Repeat the steps until there are no more digits to bring down.

Find the quotient. Check your answer. Hint: There may or may not be remainders.

1. $4 \overline{)91}$

Check:

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

$$\begin{array}{r} + \\ \hline \end{array}$$

2. $6 \overline{)89}$

Check:

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

$$\begin{array}{r} + \\ \hline \end{array}$$

3. $3 \overline{)75}$

Check:

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

$$\begin{array}{r} + \\ \hline \end{array}$$

4. $7 \overline{)84}$

Check:

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

$$\begin{array}{r} + \\ \hline \end{array}$$

5. $2 \overline{)63}$

Check:

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

$$\begin{array}{r} + \\ \hline \end{array}$$

6. $5 \overline{)96}$

Check:

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

$$\begin{array}{r} + \\ \hline \end{array}$$

Find the quotient.

7. $6 \overline{)75}$

8. $3 \overline{)57}$

9. $8 \overline{)87}$

10. $4 \overline{)92}$

11. $5 \overline{)99}$

Divide Three-Digit Numbers

When dividing a three-digit number by a one-digit number, the quotient may have two or three digits. Study these two examples.

Estimate.

$$\begin{array}{r} 200 \\ 3 \overline{)719} \end{array}$$

Think:
 $3 \overline{)7}$ is close to $3 \overline{)6}$
 $3 \overline{)6} = 2$
 So, $3 \overline{)600} = 200$

Divide.

$$\begin{array}{r} 239 \text{ R}2 \\ 3 \overline{)719} \\ -6 \\ \hline 11 \\ -9 \\ \hline 29 \\ -27 \\ \hline 2 \end{array}$$

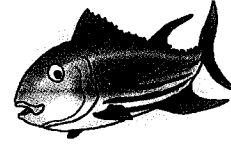
Estimate.

$$\begin{array}{r} 70 \\ 3 \overline{)235} \end{array}$$

Think:
 $3 \overline{)23}$ is close to $3 \overline{)21}$
 $3 \overline{)21} = 7$
 So, $3 \overline{)210} = 70$

Divide.

$$\begin{array}{r} 78 \text{ R}1 \\ 3 \overline{)235} \\ -21 \\ \hline 25 \\ -24 \\ \hline 1 \end{array}$$



Remember these steps:

1. Divide
2. Multiply
3. Subtract
4. Compare
5. Bring down

Repeat the steps until there are no more digits to bring down.

Estimate each quotient to the nearest ten or hundred.

1. $3 \overline{)753}$

2. $5 \overline{)173}$

3. $7 \overline{)876}$

4. $8 \overline{)333}$

5. $4 \overline{)910}$

Find the quotient. Check your answer.

6. $3 \overline{)753}$

7. $5 \overline{)173}$

8. $7 \overline{)876}$

9. $8 \overline{)333}$

10. $4 \overline{)910}$

11. $4 \overline{)515}$

12. $3 \overline{)264}$

13. $7 \overline{)199}$

14. $5 \overline{)590}$

15. $8 \overline{)678}$

Zeros in the Quotient

Sometimes there are zeros in the quotient. Study these two examples.

Estimate.

$$\begin{array}{r} 200 \\ 3 \overline{)622} \end{array}$$

Think:
 $3 \overline{)6} = 2$
 So $3 \overline{)600} = 200$

Divide.

$$\begin{array}{r} 207 \text{ R1} \\ 3 \overline{)622} \\ -6 \\ \hline 02 \\ -0 \leftarrow 3 \times 0 = 0 \\ \hline 22 \\ -21 \\ \hline 1 \end{array}$$

Estimate.

$$\begin{array}{r} 40 \\ 6 \overline{)244} \end{array}$$

Think:
 $6 \overline{)24} = 4$
 So, $6 \overline{)240} = 40$

Divide.

$$\begin{array}{r} 40 \text{ R4} \\ 6 \overline{)244} \\ -24 \\ \hline 04 \\ -0 \leftarrow 6 \times 0 = 0 \\ \hline 4 \end{array}$$

Estimate to the nearest ten or hundred.

1. $3 \overline{)616}$

2. $6 \overline{)122}$

3. $5 \overline{)545}$

4. $7 \overline{)211}$

5. $3 \overline{)962}$

Find the quotient. Check your answer.

6. $3 \overline{)616}$

7. $6 \overline{)122}$

8. $5 \overline{)545}$

9. $7 \overline{)211}$

10. $3 \overline{)962}$

11. $4 \overline{)83}$

12. $3 \overline{)392}$

13. $5 \overline{)354}$

14. $6 \overline{)1,244}$

15. $7 \overline{)1,055}$

Add, Subtract, Multiply, and Divide

Use the clues to fill in the puzzle.

Across

1. 43×9

4. $472 - 379$

6. $609 + 225$

7. $9 \overline{)153}$

8. $13,003 - 3,425$

10. $\underline{\hspace{2cm}} \times 8 = 448$

11. $466 + 905 + 95$

14. $343 \div 7$

16. $410 + 1,009 + 51 + 998$

17. $8 \overline{)384}$

18. $978 \div 6$

Down

1. 763×5

2. $6 \overline{)498}$

3. $58 + 7 + 684$

4. $1,306 - 389$

5. 97×39

9. $973 - 467$

12. $576 \div 9$

13. 208×3

15. $888 + 75$

1.	2.	3.		4.	5.
6.				7.	
		8.	9.		
10.					
	11.			12.	
13.				14.	15.
16.					
17.			18.		



MARA CROSS

Understanding Fractions

Fractions can show parts of a whole, a set, or a line. Study the examples below.

Part of a Whole:



$\frac{3}{4}$ ← colored parts
 $\frac{3}{4}$ ← total parts

In a whole, all the parts must be the same size.

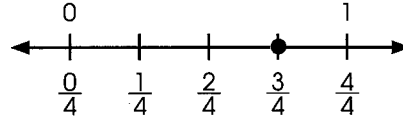
Part of a Set:



$\frac{3}{4}$ ← colored objects
 $\frac{3}{4}$ ← total objects

In a set, the objects do not have to be the same size or shape.

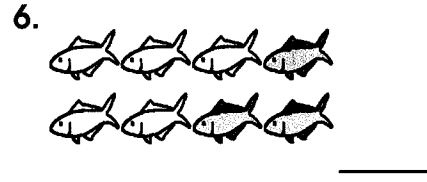
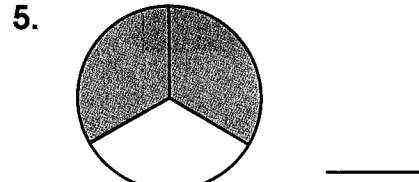
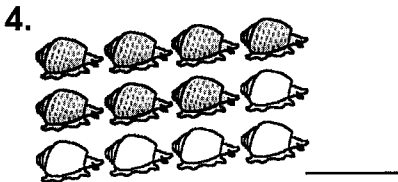
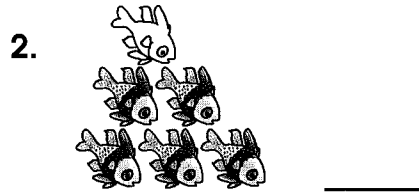
Part of a Line:



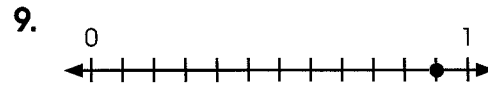
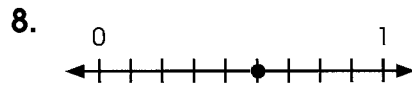
$\frac{3}{4}$ ← marks from 0
 $\frac{3}{4}$ ← total marks between 0 and 1

Think of a ruler when you work with a number line.

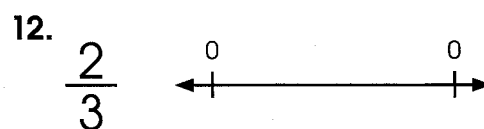
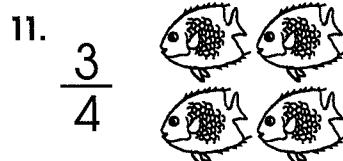
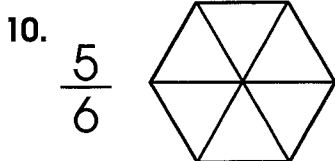
Write a fraction for the colored part of the whole or set.



Write a fraction to indicate where the red dot is on each number line.

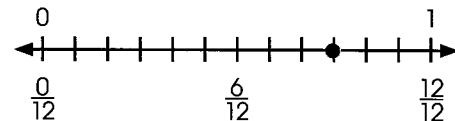
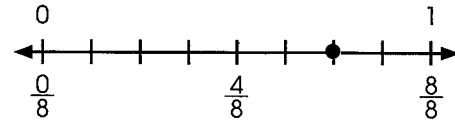
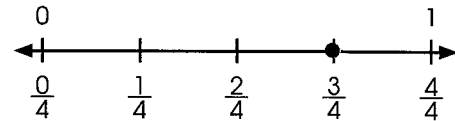
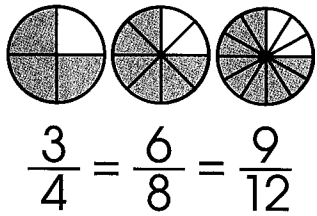


Complete the picture to show each fraction.



Equivalent Fractions

Equivalent fractions are fractions that name the same amount. Here are some different ways to show fractions equivalent to $\frac{3}{4}$.

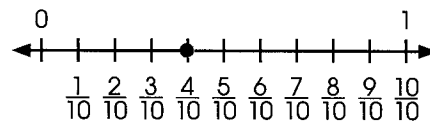
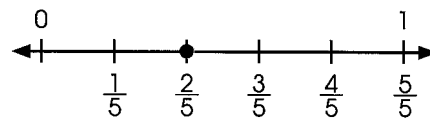
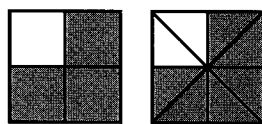


You can also multiply or divide the numerator and denominator by the same number to find equivalent fractions.

$$\frac{3}{4} \times \frac{2}{2} = \frac{6}{8} \quad \frac{3}{4} \times \frac{3}{3} = \frac{9}{12} \quad \frac{6}{8} \div \frac{2}{2} = \frac{3}{4}$$

The numerator is the part of the fraction that is above the line. The denominator is the part of the fraction that is below the line.

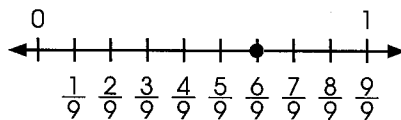
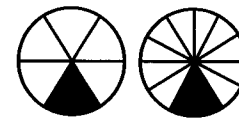
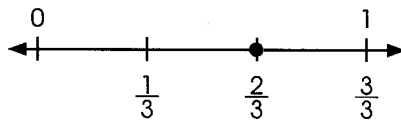
Write the missing numerator.



1. $\frac{2}{3} = \frac{\quad}{6}$

2. $\frac{3}{4} = \frac{\quad}{8}$

3. $\frac{2}{5} = \frac{\quad}{10}$



4. $\frac{5}{6} = \frac{\quad}{12}$

5. $\frac{2}{3} = \frac{\quad}{9}$

6. $\frac{1}{6} = \frac{\quad}{12}$

Multiply or divide to find the equivalent fraction.

7. $\frac{2}{3} = \frac{\quad}{15}$

8. $\frac{3}{8} = \frac{\quad}{16}$

9. $\frac{1}{2} = \frac{\quad}{12}$

10. $\frac{8}{12} = \frac{\quad}{3}$

Simplest Form Fractions

A fraction is in **simplest form** when both the numerator and denominator can only be divided by 1. You can use one or more steps to simplify a fraction.

Example 1: Simplify $\frac{8}{20}$

$$\frac{8}{20} = \frac{?}{?}$$

Think: What is the greatest number that both 8 and 20 will divide into? It's 4.

$$\frac{8}{20} \div \frac{4}{4} = \frac{2}{5}$$

Check: Can you find a number that can still divide into both 2 and 5?
No!

Example 2: Simplify $\frac{8}{20}$

Since both 8 and 20 are even, divide each number by 2.

$$\frac{8}{20} = \frac{?}{?}$$

Check: Can you find a number that can still divide into both 4 and 10? **Yes.**

$$\frac{8}{20} \div \frac{2}{2} = \frac{4}{10}$$

Since both 4 and 10 are even, divide each number by 2.

$$\frac{4}{10} \div \frac{2}{2} = \frac{2}{5}$$

Check: Can you find a number that can still divide into both 2 and 5? **No!**

If the fraction is in simplest form, write yes. If not, write the fraction in simplest form.

1. $\frac{2}{8}$ _____

2. $\frac{3}{5}$ _____

3. $\frac{6}{7}$ _____

4. $\frac{3}{9}$ _____

5. $\frac{5}{10}$ _____

6. $\frac{5}{12}$ _____

7. $\frac{9}{10}$ _____

8. $\frac{6}{15}$ _____

Write the fraction in simplest form.

9. $\frac{2}{4}$ _____

10. $\frac{6}{12}$ _____

11. $\frac{6}{8}$ _____

12. $\frac{3}{12}$ _____

13. $\frac{4}{10}$ _____

14. $\frac{6}{18}$ _____

15. $\frac{10}{20}$ _____

16. $\frac{12}{16}$ _____

17. $\frac{8}{12}$ _____

18. $\frac{12}{24}$ _____

19. $\frac{4}{4}$ _____

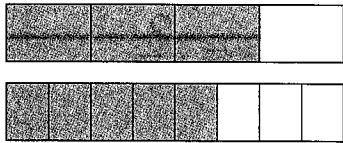
20. $\frac{0}{3}$ _____

Challenge: How can you tell when a fraction is equivalent to $\frac{1}{2}$?

Compare Fractions

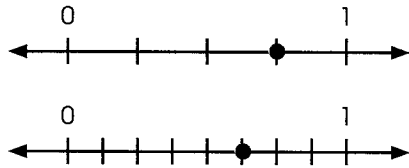
To compare fractions, you can look at pictures or objects or use equivalent fractions. Which is greater, $\frac{3}{4}$ or $\frac{5}{8}$?

Example 1:



You can see that $\frac{3}{4} > \frac{5}{8}$.

Example 2:



You can see that $\frac{3}{4}$ is further away from zero. So, $\frac{3}{4} > \frac{5}{8}$.

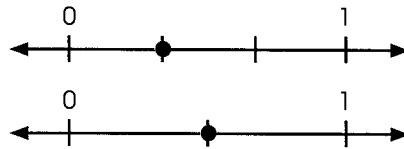
Example 3: Find equivalent fractions with a common denominator. Compare the numerators.

$$\frac{3}{4} = \frac{6}{8} \qquad \frac{5}{8} = \frac{5}{8}$$

$$\frac{6}{8} > \frac{5}{8}$$

so, $\frac{3}{4} > \frac{5}{8}$

Compare the fractions. Write $<$, $>$, or $=$ in the .



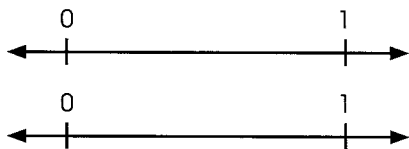
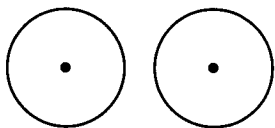
1. $\frac{6}{8}$ $\frac{1}{2}$

2. $\frac{2}{3}$ $\frac{4}{6}$

3. $\frac{1}{3}$ $\frac{1}{2}$

Complete the fraction pictures to show the fractions in each problem.

Compare the fractions and then write $<$, $>$, or $=$ in the .



4. $\frac{3}{4}$ $\frac{3}{8}$

5. $\frac{2}{3}$ $\frac{8}{12}$

6. $\frac{1}{3}$ $\frac{5}{6}$

Compare. Write $<$, $>$, or $=$ in the .

7. $\frac{4}{6}$ $\frac{1}{3}$

8. $\frac{3}{6}$ $\frac{5}{10}$

9. $\frac{3}{5}$ $\frac{1}{2}$

10. $\frac{1}{2}$ $\frac{3}{8}$

11. $\frac{3}{6}$ $\frac{3}{4}$

12. $\frac{1}{2}$ $\frac{1}{4}$

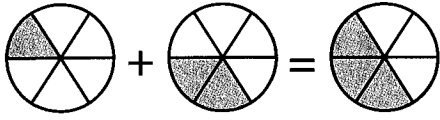
13. $\frac{1}{3}$ $\frac{3}{4}$

14. $\frac{3}{4}$ $\frac{4}{5}$

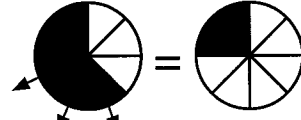
Add and Subtract Like Fractions

When fractions have like (or common) denominators, you can add or subtract them.

- The denominator remains the same.
- Add or subtract the numerators.
- Write the sum or difference in simplest form.
- Fractions can be represented by number sentences.

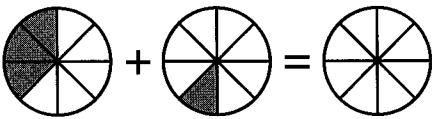


$$\frac{1}{6} + \frac{2}{6} = \frac{3}{6} = \frac{1}{2}$$

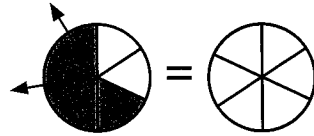


$$\frac{5}{8} - \frac{3}{8} = \frac{2}{8} = \frac{1}{4}$$

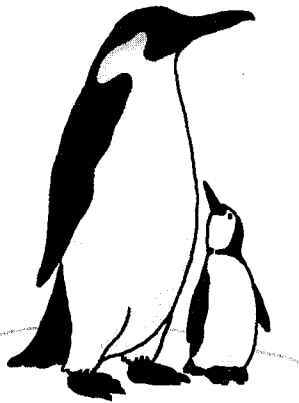
Find the sum or difference. Color the circle on the right to show the answer. Write the answer in simplest form.



1. $\frac{3}{8} + \frac{1}{8} = \underline{\quad} = \underline{\quad}$



2. $\frac{4}{6} - \frac{2}{6} = \underline{\quad} = \underline{\quad}$



Find the sum or difference. Write the answer in simplest form.

3. $\frac{3}{8} + \frac{4}{8} = \underline{\quad}$

4. $\frac{1}{6} + \frac{3}{6} = \underline{\quad}$

5. $\frac{6}{8} - \frac{4}{8} = \underline{\quad}$

6. $\frac{5}{6} - \frac{2}{6} = \underline{\quad}$

7. $\frac{7}{12} - \frac{3}{12} = \underline{\quad}$

8. $\frac{3}{10} + \frac{5}{10} = \underline{\quad}$

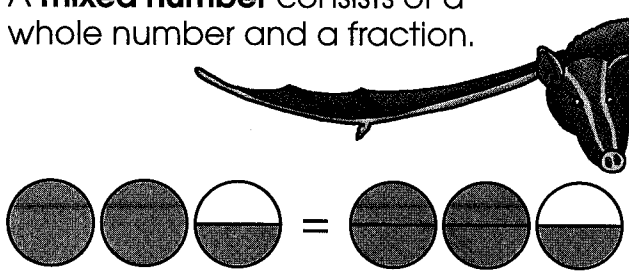
9. $\frac{2}{9} + \frac{4}{9} = \underline{\quad}$

10. $\frac{3}{4} + \frac{1}{4} = \underline{\quad}$

11. $\frac{7}{9} - \frac{4}{9} = \underline{\quad}$

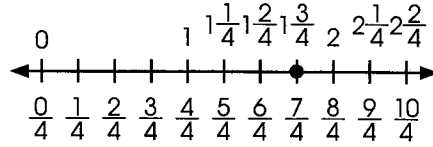
Mixed Numbers

A **mixed number** consists of a whole number and a fraction.



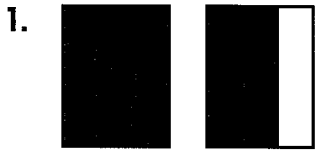
$$2\frac{1}{2} = \frac{5}{2}$$

An **improper fraction** consists of a numerator that is greater than or equal to the denominator.



$$1\frac{3}{4} = \frac{7}{4}$$

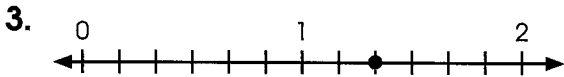
Write an improper fraction and a mixed number in simplest form for each picture.



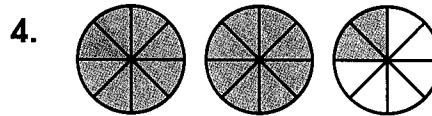
$$\underline{\quad} = \underline{\quad}$$



$$\underline{\quad} = \underline{\quad}$$



$$\underline{\quad} = \underline{\quad}$$



$$\underline{\quad} = \underline{\quad}$$

Write a whole number or a mixed number in simplest form for each improper fraction.

5. $\frac{5}{4} = \underline{\quad}$

6. $\frac{9}{6} = \underline{\quad}$

7. $\frac{6}{3} = \underline{\quad}$

8. $\frac{10}{8} = \underline{\quad}$

9. $\frac{7}{7} = \underline{\quad}$

10. $\frac{9}{4} = \underline{\quad}$

11. $\frac{16}{5} = \underline{\quad}$

12. $\frac{10}{4} = \underline{\quad}$

Add and Subtract Mixed Numbers

Mixed numbers with common denominators can be added and subtracted.

Write mixed numbers as improper fractions, then add or subtract.
Write the answer as a mixed number in simplest form.

$$1 \frac{3}{4} + 2 \frac{3}{4} = \frac{7}{4} + \frac{11}{4} = \frac{18}{4} = 4 \frac{2}{4} = 4 \frac{1}{2}$$

Use equivalent fractions to find common denominators. Then add or subtract.

$$3 \frac{1}{3} - 1 \frac{1}{6} = \frac{10}{3} - \frac{7}{6} = \frac{20}{6} - \frac{7}{6} = \frac{13}{6} = 2 \frac{1}{6}$$

Find the sum or difference.

Write the answer as a mixed number in simplest form.

1. $1 \frac{7}{8} - \frac{5}{8} = \underline{\hspace{2cm}}$

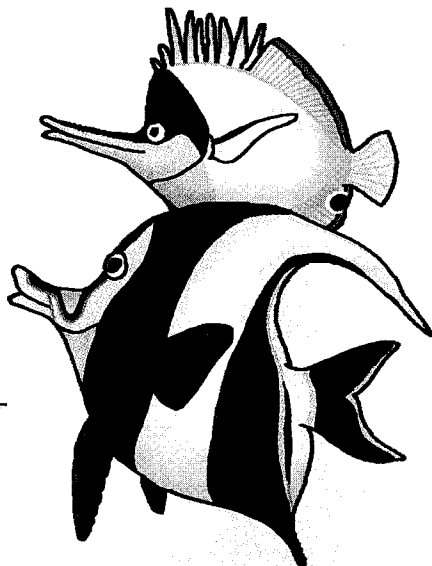
2. $3 \frac{1}{5} + 2 \frac{3}{5} = \underline{\hspace{2cm}}$

3. $2 \frac{1}{3} + 3 \frac{3}{9} = \underline{\hspace{2cm}}$

4. $4 \frac{3}{7} - 2 \frac{5}{7} = \underline{\hspace{2cm}}$

5. $3 \frac{7}{8} + 2 \frac{1}{4} = \underline{\hspace{2cm}}$

6. $5 \frac{1}{2} - 2 \frac{3}{4} = \underline{\hspace{2cm}}$



Solve Word Problems with Fractions

Find the sum or difference. Write the answers in simplest form.

1. Ben read $\frac{1}{2}$ of a book for a homework assignment. Later, he read another $\frac{1}{3}$ of the book. How much of the book has Ben read so far?

2. The high school sold tickets to a talent show. They started with $5\frac{1}{3}$ rolls of tickets. They sold $3\frac{2}{3}$ of the rolls. How many rolls of tickets do they have left?

3. Ms. Snow wants to make a quilt. She has some fabric that measures $\frac{3}{8}$ yard, $\frac{5}{8}$ yard, and $1\frac{7}{8}$ yards. How much fabric does she have in all?

4. There were 10 pizzas at a party. The guests ate $7\frac{3}{8}$ of all the pizza. How much pizza was left?

5. A piece of paper was $4\frac{1}{2}$ inches wide. It was trimmed $\frac{5}{8}$ of an inch. How wide is the paper now?

6. Anna ran $1\frac{1}{3}$ miles yesterday and $1\frac{3}{4}$ miles today. How far did she run in the two days?

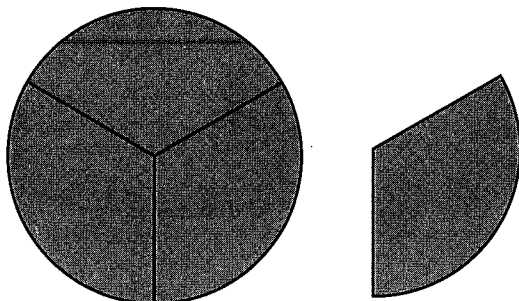
7. A baker had $5\frac{1}{4}$ cups of flour. He used $3\frac{1}{2}$ cups of flour to make biscuits. How much flour does he have left?

8. My aunt is knitting a scarf. The scarf was $2\frac{5}{6}$ feet long. Then she knit another $\frac{2}{3}$ foot. How long is the scarf now?

Multiply Fractions by Whole Numbers

Multiplication of a fraction by a whole number is repeated addition of the fraction.

$$4 \times \frac{1}{3} = \frac{1}{3} + \frac{1}{3} + \frac{1}{3} + \frac{1}{3} = \frac{4}{3}$$



This is the same as multiplying the numerator of the fraction by the whole number.

$$6 \times \frac{3}{5} = \frac{18}{5}$$

Write each addition problem as a multiplication problem.
Find each sum and product. Write the answers in simplest form.

1. $\frac{1}{2} + \frac{1}{2} + \frac{1}{2} = \underline{\hspace{2cm}}$

$\underline{\hspace{1cm}} \times \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$

2. $\frac{3}{8} + \frac{3}{8} + \frac{3}{8} + \frac{3}{8} = \underline{\hspace{2cm}}$

$\underline{\hspace{1cm}} \times \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$

3. $\frac{1}{5} + \frac{1}{5} = \underline{\hspace{2cm}}$

$\underline{\hspace{1cm}} \times \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$

4. $\frac{6}{7} + \frac{6}{7} + \frac{6}{7} + \frac{6}{7} + \frac{6}{7} = \underline{\hspace{2cm}}$

$\underline{\hspace{1cm}} \times \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$

Write each multiplication problem as an addition problem.
Find each product and sum. Write the answers in simplest form.

5. $2 \times \frac{1}{9} = \underline{\hspace{2cm}}$

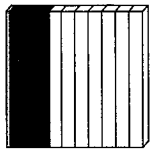
$\underline{\hspace{1cm}} + \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$

6. $3 \times \frac{5}{4} = \underline{\hspace{2cm}}$

$\underline{\hspace{1cm}} + \underline{\hspace{1cm}} + \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$

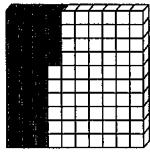
Fractions-Tenths and Hundredths

Study these examples to learn about fractions with 10 or 100 as the denominator.



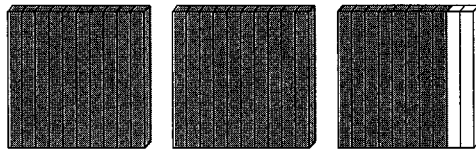
$$\frac{3}{10}$$

three-tenths



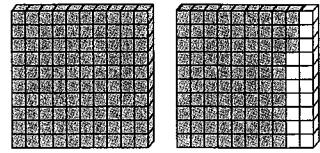
$$\frac{34}{100}$$

thirty-four hundredths



$$2 \frac{8}{10}$$

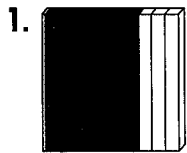
two and eight-tenths



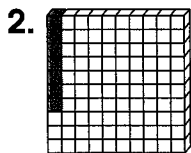
$$1 \frac{83}{100}$$

one and eighty-three hundredths

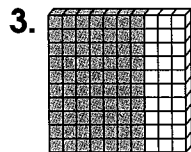
Write the fraction or mixed number for the colored part of each picture. Then write the fraction word name.



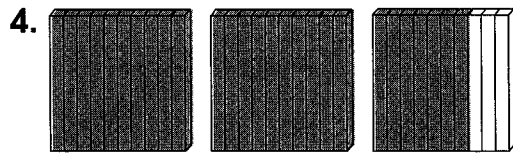
_____ , _____



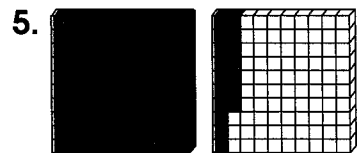
_____ , _____



_____ , _____



_____ , _____




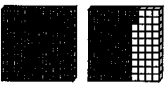


_____ , _____



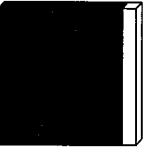
_____ , _____

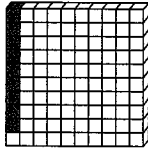
Decimal Place Value

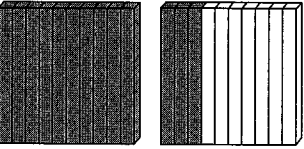
fraction	meaning	ones	tenths	hundredths	decimal	word name
$\frac{3}{10}$		0	.	3	0.3	three tenths
$\frac{3}{100}$		0	.	0	0.03	three hundredths
$2\frac{7}{10}$		2	.	7	2.7	two and seven tenths
$1\frac{62}{100}$		1	.	6	1.62	one and sixty-two hundredths

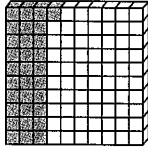
say "and" for the decimal point.

Write the fraction or mixed number and decimal for the colored part of each picture.

1.  _____, _____

2.  _____, _____

3.  _____, _____

4.  _____, _____

Write the decimal for each number name.

5. three and eight tenths _____

6. thirty-eight hundredths _____

7. five and seven hundredths _____

8. fifty-seven hundredths _____

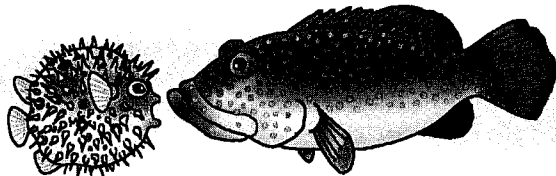
Tell the place value of the 5 in each number.

9. 3.5 _____

10. 5.3 _____

11. 3.25 _____

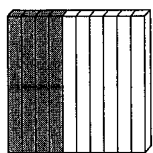
12. 53.7 _____



Equivalent Decimals

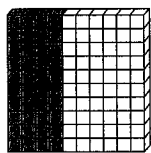
Equivalent decimals are decimals that name the same amount.

Equivalent decimals:



0.4

=

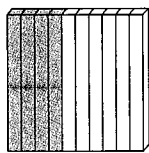


0.40

four tenths equals forty hundredths

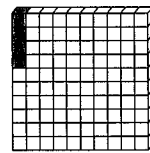


Decimals **not** equivalent:



0.4

≠




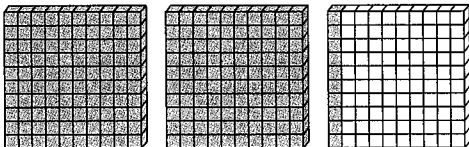
0.04

four tenths does not equal four hundredths

Always write a zero in the ones place in a decimal when the value of the decimal is less than 1.

Write two decimals and two word names for each picture.

1.  _____ , _____
 _____ , _____

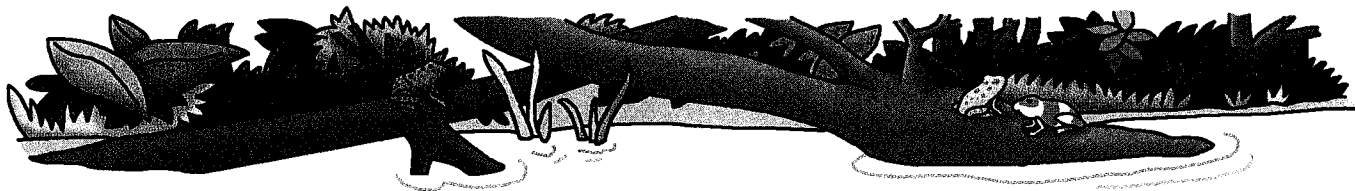
2.  _____ , _____
 _____ , _____

Rewrite each decimal in hundredths.

3. $0.9 =$ _____ 4. $0.2 =$ _____ 5. $3.6 =$ _____ 6. $5.0 =$ _____

Rewrite each decimal in tenths. Be careful!

7. $1.40 =$ _____ 8. $0.60 =$ _____ 9. $7.30 =$ _____ 10. $0.08 =$ _____



Compare and Order Decimals

Compare **2.38** and **2.8**.

Line up the decimal points.



2.38
2.8

2.8 = 2.80
Write the numbers as equivalent decimals to the same place.

Begin at the left. Find the first place where the digits are different. Then compare.


2.38
2.80












3 tenths < 8 tenths **2.38 < 2.8**

> means greater than
< means less than
= means equal to

The sign points to the number that is less.

Compare the numbers. Write <, >, or = in the .

- | | | |
|---|--|---|
| 1. 0.7  0.07 | 2. 0.39  3.9 | 3. 3.15  3.5 |
| 4. 4.5  4.50 | 5. 4.5  4.05 | 6. 2.99  3 |
| 7. 3.01  301 | 8. 8.53  85.3 | 9. 6  6.00 |

Write the decimals in order from least to greatest.

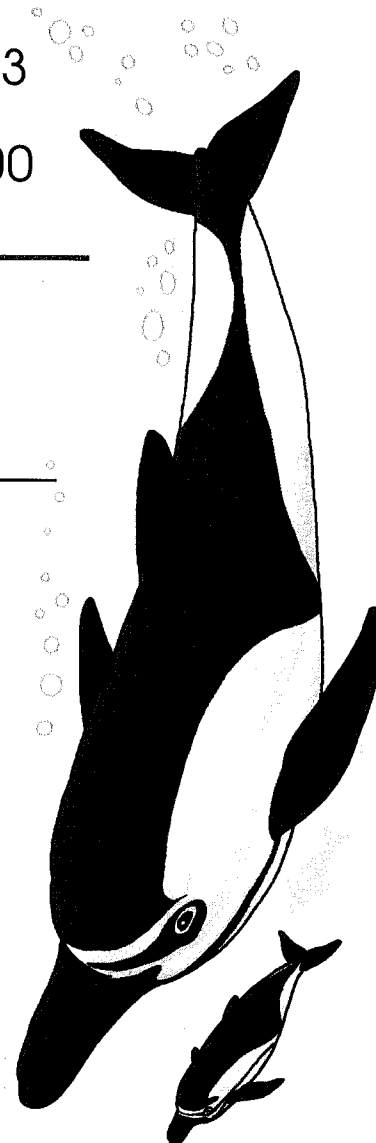
10. 0.38 8.3 0.83 3.8

11. 1.05 0.15 1.5 15

12. 0.7 0.07 7 70.0

13. 0.02 0.22 0.2 2.0

14. 346.1 34.61 3,461 346.01



Add Decimals

Add **3.8**, **1.53**, and **6**.

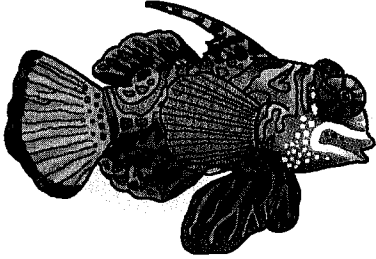
Remember the decimal point is at the end of a whole number.
 $6 = 6.0$ or 6.00

Line up the decimal points. Write equivalent decimals as needed.

$$\begin{array}{r} \downarrow \\ 3.80 \\ 1.53 \\ + 6.00 \\ \hline \end{array}$$

Add like whole numbers.

$$\begin{array}{r} 3.80 \\ 1.53 \\ + 6.00 \\ \hline 3 \\ 130 \\ + 1000 \\ \hline 11.33 \end{array}$$



Find the sum.

1.
$$\begin{array}{r} 5.9 \\ + 3.7 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 6.38 \\ + 0.5 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 0.7 \\ + 0.65 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 4.09 \\ + 3.91 \\ \hline \end{array}$$

5.
$$\begin{array}{r} \$23.65 \\ + \$ 9.71 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 7.38 \\ 4.6 \\ + 0.38 \\ \hline \end{array}$$

7.
$$\begin{array}{r} 6.7 \\ 8 \\ + 0.49 \\ \hline \end{array}$$

8.
$$\begin{array}{r} 23.5 \\ 2.35 \\ + 0.02 \\ \hline \end{array}$$

9.
$$\begin{array}{r} 4.6 \\ 4.06 \\ + 46 \\ \hline \end{array}$$

10.
$$\begin{array}{r} 3.0 \\ 0.3 \\ + 3.03 \\ \hline \end{array}$$

Rewrite as a vertical problem. Find the sum.

11. $3.8 + 0.62$

12. $\$4.37 + \1.99

13. $1.5 + 0.15 + 5.1$

14. $40.8 + 4.08$

15. $\$7.09 + \8

16. $6.7 + 67 + 0.67$

Subtract Decimals

Subtract:
5.3 - 2.18

Line up the decimal points. Write equivalent decimals as needed.

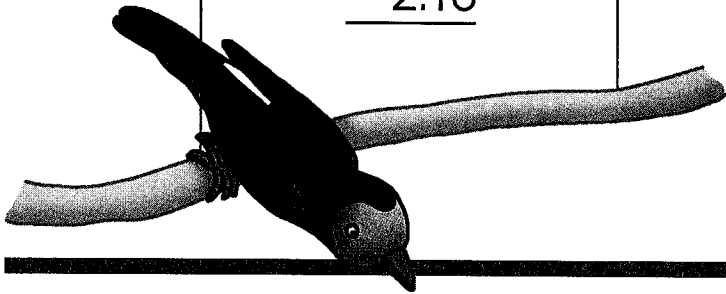
$$\begin{array}{r} 5.30 \\ - 2.18 \\ \hline \end{array}$$

Subtract like whole numbers. Regroup as needed.

$$\begin{array}{r} 10 \\ 5.\cancel{3}0 \\ - 2.18 \\ \hline 3.12 \end{array}$$

Check:

$$\begin{array}{r} 3.12 \\ + 2.18 \\ \hline 10 \\ 20 \\ + 500 \\ \hline 5.30 \end{array}$$



Find the difference.

1. $\begin{array}{r} 8.3 \\ - 1.5 \\ \hline \end{array}$

2. $\begin{array}{r} 4.58 \\ - 3.9 \\ \hline \end{array}$

3. $\begin{array}{r} 6.5 \\ - 0.79 \\ \hline \end{array}$

4. $\begin{array}{r} \$5.25 \\ - \$1.79 \\ \hline \end{array}$

5. $\begin{array}{r} \$8.50 \\ - \$3.99 \\ \hline \end{array}$

Rewrite as a vertical problem. Find the difference.

6. $6.5 - 3.8$

7. $9 - 3.7$

8. $\$20 - \4.83

9. $7.05 - 1.9$

10. $9.2 - 0.92$

11. $\$15.26 - \3.27

Solve each problem.

12. Miss James has 59.3 acres of land. She brought 25 more acres. How much land does she have now?

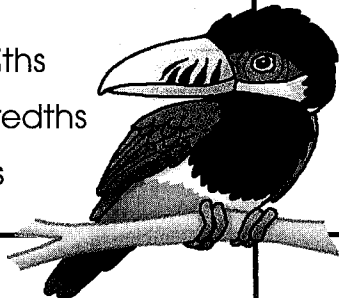
13. Kevin bought a belt for \$5.39. He paid for it with a \$10 bill. How much change should he get?

Fractions and Decimals

Circle the correct letter.

1. The word name for 6.7 is _____.

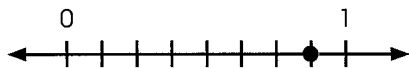
- A. sixty-seven tens
- B. sixty-seven hundredths
- C. six and seven hundredths
- D. six and seven tenths



2. Which set of decimals is in order from least to greatest?

- A. 0.57 5.7 5.07 50.7
- B. 0.57 5.07 5.7 50.7
- C. 5.7 5.07 0.57 50.7
- D. 50.7 5.7 5.07 0.57

3. The red dot is at _____.



- A. 0.1
- B. $\frac{1}{8}$
- C. $\frac{7}{8}$
- D. $1\frac{1}{3}$

4. Which number sentence is not true?

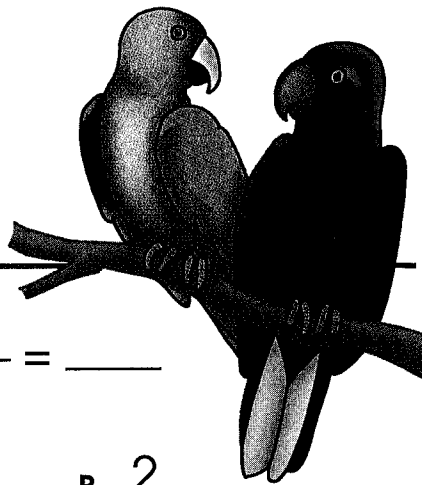
- A. $\frac{1}{3} < \frac{3}{5}$
- B. $\frac{3}{5} = \frac{2}{4}$
- C. $0.75 > 0.5$
- D. $3.8 < 3.88$

5. $8.3 + 0.25 + 4 =$ _____

- A. 12.55
- B. 11.2
- C. 1.12
- D. 8.32

6. $5.3 - 1.79 =$ _____

- A. 3.24
- B. 3.51
- C. 12.6
- D. 7.37



7. $\frac{2}{3} + \frac{1}{4} =$ _____

- A. $\frac{3}{7}$
- B. $\frac{1}{4}$
- C. $\frac{2}{12}$
- D. $\frac{11}{12}$

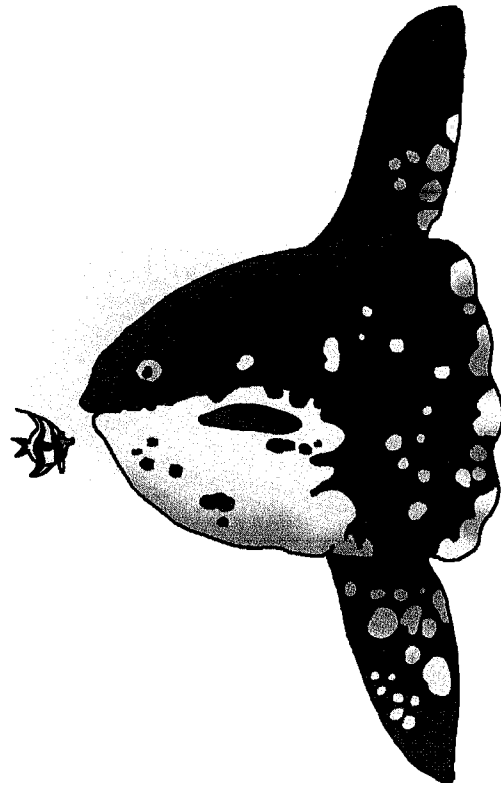
8. $\frac{3}{4} - \frac{1}{8} =$ _____

- A. $\frac{1}{3}$
- B. $\frac{2}{4}$
- C. $\frac{1}{4}$
- D. $\frac{5}{8}$

Measurement Units

In the following table, each row displays equal amounts.

1 km (kilometer)	1000 m (meters)
1 m (meter)	100 cm (centimeters)
1 kg (kilogram)	1000 g (grams)
1 lb (pound)	16 oz (ounces)
1 L (liter)	1000 mL (milliliters)
1 hr (hour)	60 min (minutes)
1 min (minute)	60 sec (seconds)
1 yd (yard)	3 ft (feet)
1 ft (foot)	12 in (inches)



How long is a 6 ft rope in inches?

$$6 \text{ ft} = 6 \times 12 \text{ in} = 72 \text{ in}$$

Solve each problem.

1. A student spent 3 hours at a museum. How many minutes did the student spend at the museum?

2. A watermelon weighs 4 lbs. How much does the melon weigh in ounces?

3. Chelsea walked 1 km home from school. How far did she walk in centimeters?

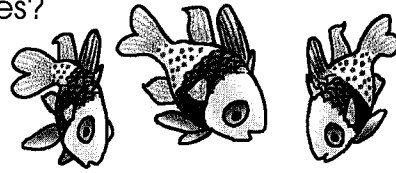
4. How many milliliters of soda are in a 2 L bottle?

More with Measurement Units

Robert is 5 feet (ft) 2 inches (in) tall. How tall is he in inches?

$$5 \text{ ft} = 5 \times 12 \text{ in} = 60 \text{ in}$$

$$60 \text{ in} + 2 \text{ in} = 62 \text{ in}$$



Solve each problem.

1. A school held a $\frac{5}{4}$ km race. How far did the runners race in meters?

2. How many inches are around a rectangle that is 4 feet long and 3 feet wide?

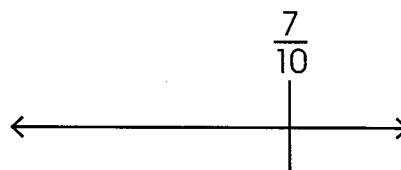
3. Frida is 4 ft 10 in tall. How many inches tall is she?

4. Billy is 4 feet tall. His older brother is 5 inches taller. His sister is 8 inches taller than his older brother. Is Billy's sister taller or shorter than 5 ft? How much taller or how much shorter?

5. There are 100 pennies in 1 dollar. A certain postage stamp costs 83 pennies. How much does the postage stamp cost in dollars? Give your answer both in a fraction and a decimal.

6. There are 25 pennies in 1 quarter. Loren paid 9 quarters for a greeting card. How much money did he spend in dollars? Give your answer as a decimal.

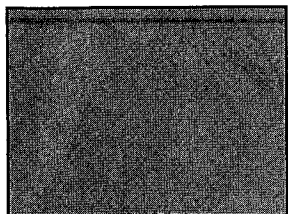
7. This line segment represents 1 meter. What length does the dash, labeled $\frac{7}{10}$, represent in centimeters?



Area and Perimeter

The **perimeter** is the distance around a figure. Perimeter is measured in linear units. The **area** is the number of square units needed to cover a figure. Area is measured in square units.

A rectangle has two pairs of equal sides.



5 cm

This rectangle has a length of 5 cm and a width of 3 cm.

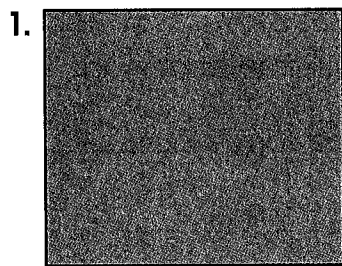
3 cm Its perimeter is $3\text{ cm} + 5\text{ cm} + 3\text{ cm} + 5\text{ cm} = 16\text{ cm}$.

Its area is $5\text{ cm} \times 3\text{ cm} = 15\text{ cm}^2$.

The perimeter of any rectangle is $P = 2l + 2w$, where l is the length of the rectangle and w is the width of the rectangle.

The area of any rectangle is $A = l \times w$, where l is the length of the rectangle and w is the width of the rectangle.

Find the perimeter and area of each rectangle.

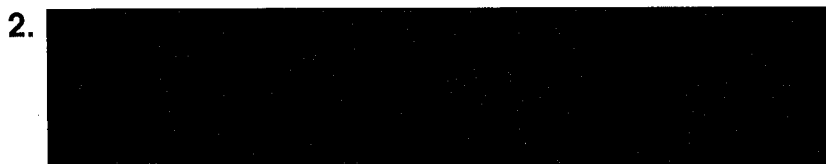


6 in

7 in

perimeter _____

area _____



2 ft

10 ft

perimeter _____

area _____

Find the length of the room given the area and the width.

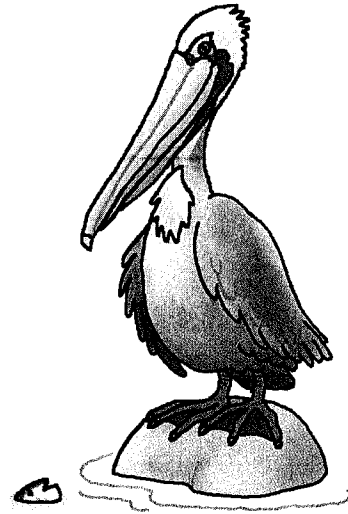
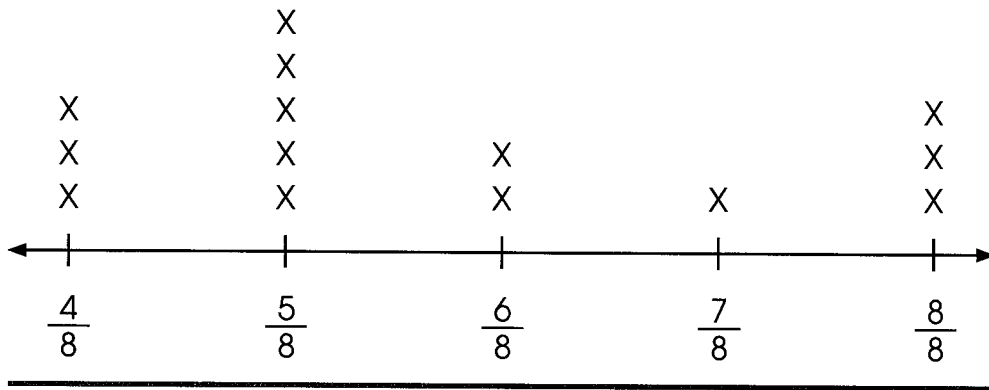
3. A room with an area of 110 ft^2 is 10 ft wide.

$$110 = l \times 10$$

length _____

Line Plots

Jesse has a coin collection. The following line plot shows how many coins in the collection have a given diameter in inches. There is an X for each coin with the given diameter.



Solve each problem. All answers should be in inches.

1. What is the difference in diameter between the largest coins and the smallest coins, in simplest form? _____

2. Jesse takes 1 coin with a diameter of $\frac{5}{8}$ in and 1 coin with a diameter of $\frac{7}{8}$ in.

What is the sum of the diameters of these two coins, in simplest form? _____

3. Jesse takes 1 coin with a diameter of $\frac{4}{8}$ in and 1 coin with a diameter of $\frac{6}{8}$ in.

What is the sum of the diameters of these two coins, in simplest form? _____

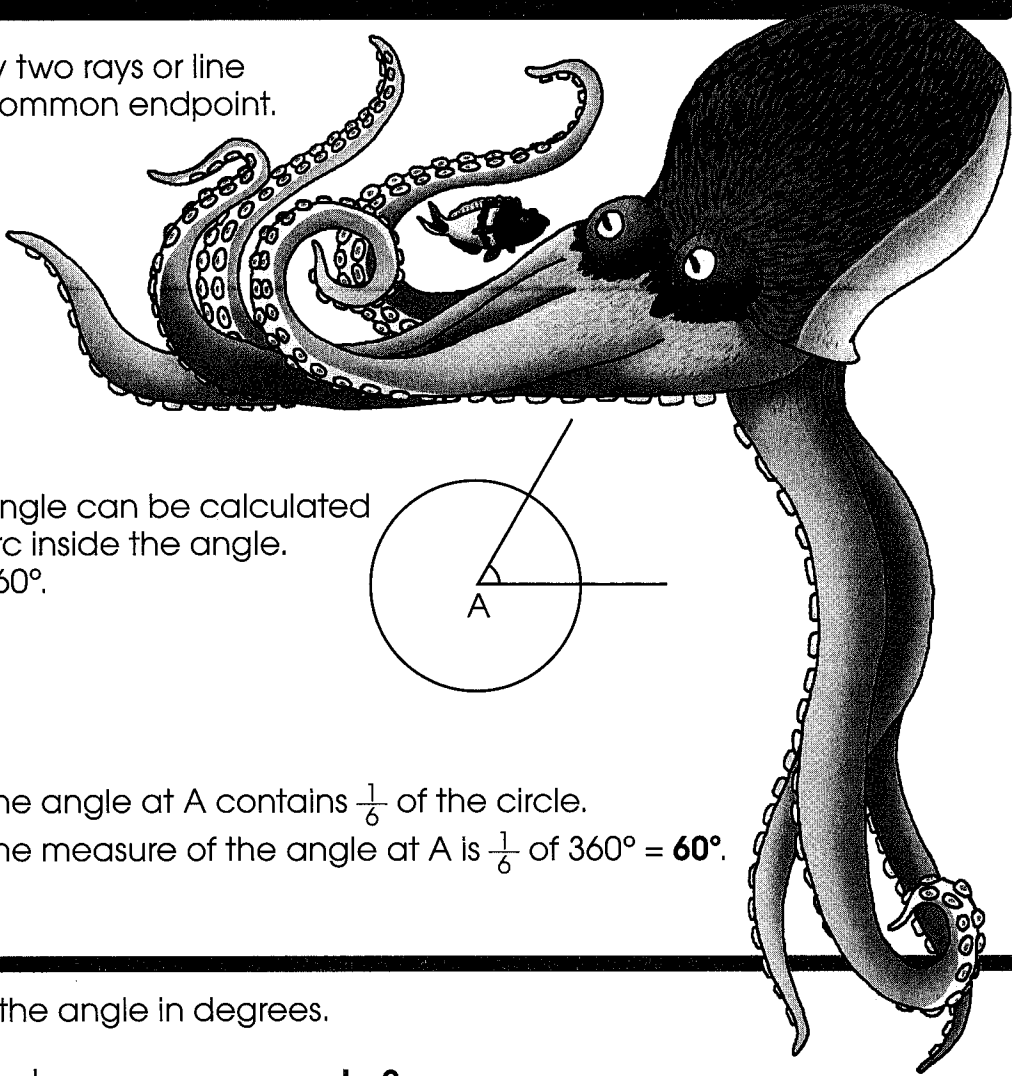
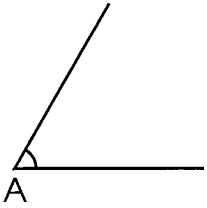
4. Jesse takes 1 coin with a diameter of $\frac{4}{8}$ in and 1 coin with a diameter of $\frac{7}{8}$ in.

What is the sum of the diameters of these two coins, in simplest form? _____

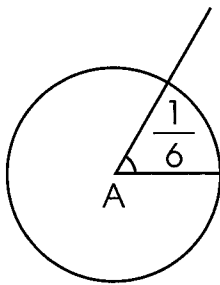
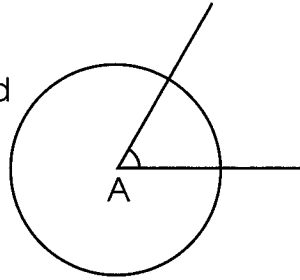
5. What is the sum of the diameters of all the coins? _____

Angles

An **angle** is formed by two rays or line segments sharing a common endpoint.



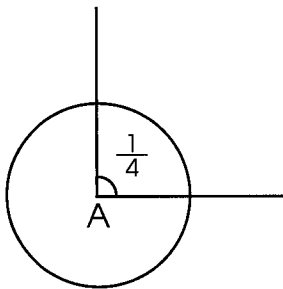
The measure of the angle can be calculated from the size of the arc inside the angle. An entire circle has 360° .



The angle at A contains $\frac{1}{6}$ of the circle. The measure of the angle at A is $\frac{1}{6}$ of $360^\circ = 60^\circ$.

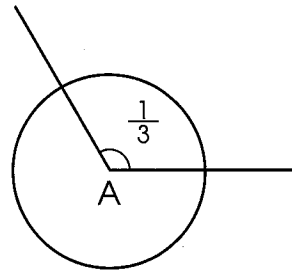
Find the measure of the angle in degrees.

1.



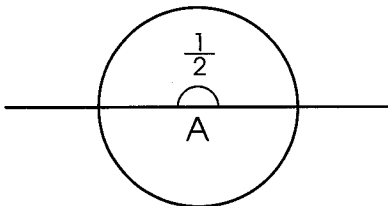
measure = _____

2.



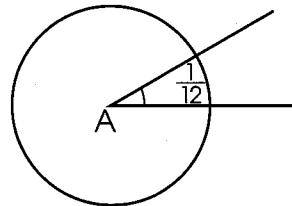
measure = _____

3.



measure = _____

4.

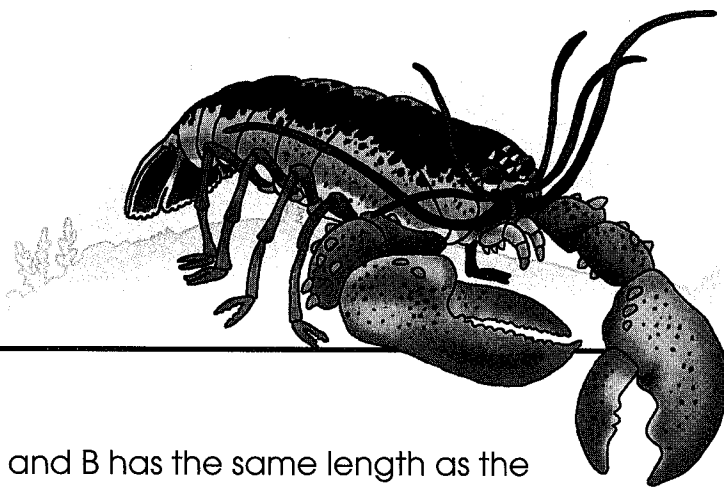


measure = _____

Lines, Angles, and Shapes

Perpendicular lines meet at right angles. **Parallel lines** follow the same direction and never touch.

1. Complete the rectangle by drawing the remaining two sides.

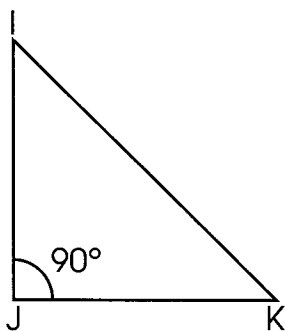


Fill in the blanks.

- The line segment between points A and B has the same length as the line segment between points _____ and _____.
- The line segment between points A and B is perpendicular to the line segment between points _____ and _____.
- The line segment between points A and B is parallel to the line segment between the points _____ and _____.

A **right angle** measures 90° . An **acute angle** measures less than 90° . An **obtuse angle** measures greater than 90° .

A **right triangle** is a triangle in which one angle is a right angle. The following triangle is a right triangle.

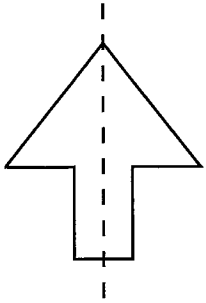


Answer the questions using this figure.

- At which point is the angle a right angle? _____
- Are the other two angles acute or obtuse? _____

Lines of Symmetry

A **line of symmetry** is a line which can be drawn onto a figure creating two parts that are the mirror image of each other.

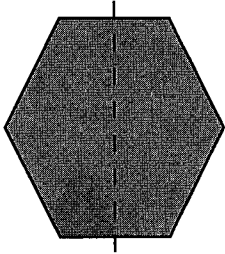


The dashed line in the figure is a line of symmetry.

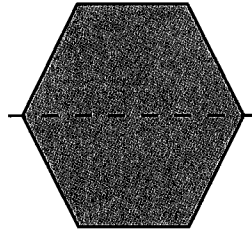


Determine whether each dashed line is a line of symmetry for the figure or not. Answer yes or no.

1.



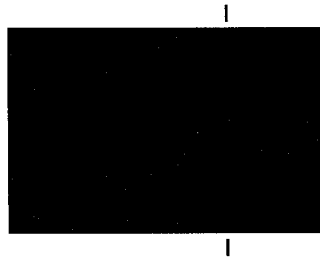
2.



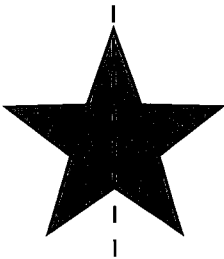
3.



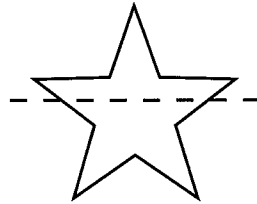
4.



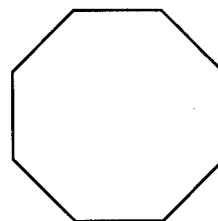
5.



6.



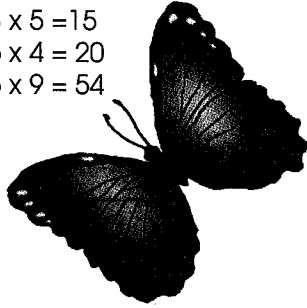
7. There are 8 possible lines of symmetry for this figure. Draw at least three of them.



Answer Key

Page 1

1. 8 ; $2 \times 4 = 8$
2. 15 ; $3 \times 5 = 15$
3. 21 ; $3 \times 7 = 21$
4. 20 ; $5 \times 4 = 20$
5. 24 ; $4 \times 6 = 24$
6. 54 ; $6 \times 9 = 54$
7. 18 ; $6 + 6 + 6 = 18$
8. 24 ; $8 + 8 + 8 = 24$



Page 2

1. $8 \times 6 = 48$ crayons
2. $3 \times 7 = 21$ miles
3. $9 \times 2 = 18$ socks
4. $9 \times 6 = 54$ players
5. $7 \times 4 = 28$ books
6. $2 \times 6 = 12$ times
7. $8 \times 3 = 24$ tennis balls
8. $9 \times 7 = 63$ slices
9. $8 \times 5 = 40$ seeds

Page 3

1. $6 \times 7 = 42$ cereal bars
2. $36 \div 9 = 4$ rows
3. $64 \div 8 = 8$ days
4. $6 \times 8 = 48$ ounces
5. $45 \div 9 = 5$ jump ropes
6. $36 \div 6 = 6$ boxes
7. $4 \times 5 = 20$ batteries

Page 4

1. $2 \times 9 = 18$
2. $5 \times 5 = 25$
3. $3 \times 9 = 27$
4. $6 \times 4 = 24$
or $3 \times 8 = 24$
5. $5 \times 6 = 30$
6. $8 \times 7 = 56$
7. $3 \times 7 = 21$
8. $7 \times 7 = 49$
9. $3 \times 5 = 15$
10. $3 \times 4 = 12$
11. $9 \times 4 = 36$
12. $7 \times 6 = 42$
13. $6 \times 8 = 48$
14. $5 \times 7 = 35$
15. $8 \times 9 = 72$
16. $2 \times 8 = 16$
17. $7 \times 3 = 21$
18. $8 \times 3 = 24$

Page 5

1. 1, 3, 9
2. 1, 2, 4, 8
3. 1, 2, 3, 6, 9, 18
4. 1, 2, 5, 10; no
5. 1, 7; yes



Page 6

1. 15
2. 12
- 150
- 120
- 1,500
- 1,200
3. 42
4. 64
- 420
- 640
- 4,200
- 6,400
5. 18
6. 28
- 180
- 280
- 1,800
- 2,800
7. 40
8. 7
9. 1,200
10. 500
11. 300
12. 30

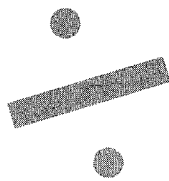


Page 7

1. $9 \times 3 \times 3 = 9$
2. $28 \times 4 \times 7 = 28$
3. $40 \times 5 \times 8 = 40$
4. $16 \times 4 \times 4 = 16$
5. $6 \times 5 = 30$ miles
6. $56 \div 7 = 8$ beads
7. $36 \div 4 = 9$ dollars
8. $8 \times 6 = 48$ slices
9. $6 = 1 \times 6$ $6 = 2 \times 3$
1, 2, 3, 6
no

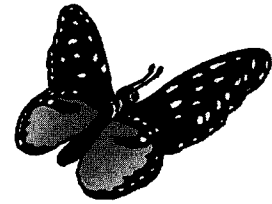
Page 8

1. thousands - 0, hundreds - 3, tens - 5, ones - 0
2. thousands - 1, hundreds - 8, tens - 8, ones - 0
3. thousands - 5, hundreds - 5, tens - 0, ones - 0
4. 7,432
5. 6,341
6. 1,095



Page 9

1. 57,269
2. 305,806
3. 740,053
4. $30,000 + 4,000 + 500 + 60 + 2$
5. $600,000 + 20,000 + 1,000 + 700$
6. $400,000 + 3,000 + 80 + 7$
7. thirty-five thousand, six hundred twenty-one
8. two hundred forty-six thousand, eight hundred nine



Page 10

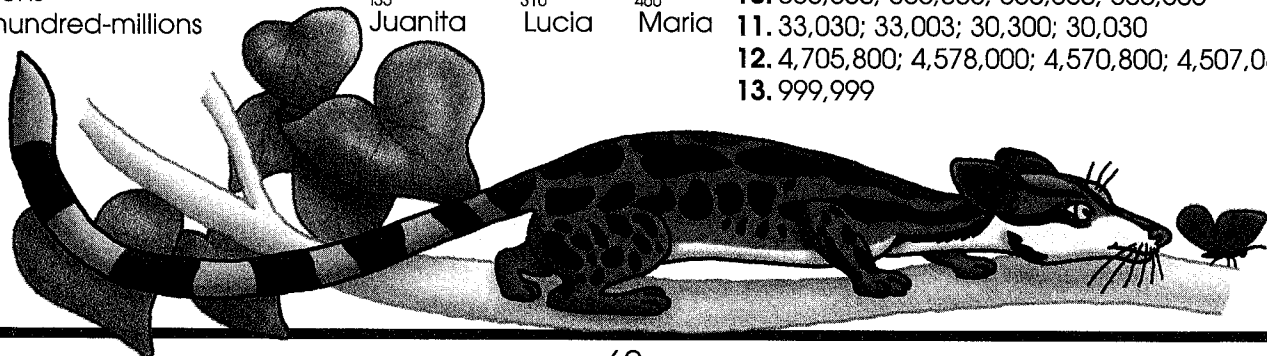
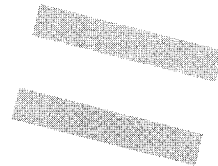
1. 9,103,205
2. 433,647,112
3. 17,221,050
4. ten-millions
5. millions
6. thousands
7. ten-thousands
8. tens
9. hundred-millions

Page 11

1. $>$ 2. $>$ 3. $>$
4. $<$ 5. $<$ 6. $=$
7. $<$ 8. $<$ 9. $<$
10. 149; 287; 324; 822
11. 2,118; 2,973; 3,006; 3,652
12. 2,821; 2,840; 4,431; 4,931
- 13.

Page 12

1. $>$ 2. $<$
3. $>$ 4. $<$
5. $<$
6. $<$
7. $=$
8. $>$
9. 20,000; 20,200; 20,202; 22,000
10. 556,556; 556,565; 565,556; 565,565
11. 33,030; 33,003; 30,300; 30,030
12. 4,705,800; 4,578,000; 4,570,800; 4,507,080
13. 999,999



Answer Key

Page 13

1. 40
2. 90
3. 60
4. 390
5. 250
6. 810
7. 1,280
8. 4,070
9. 8,760
10. 400
11. 500
12. 400
13. 1,900
14. 2,500
15. 7,500
16. 100
17. 100
18. 0
19. \$2.00
20. \$8.00
21. \$28.00

Page 14

1. 3,000
2. 7,000
3. 8,000
4. 15,000
5. 41,000
6. 30,000
7. 1,000
8. 0
9. 0
10. 19,000
11. 17,000
12. 12,000
13. 7,000
14. 761,610
15. 761,600
16. 762,000
17. 760,000
18. 800,000
19. 1,000,000

Page 15

1. >
2. >
3. <
4. =
5. 505; 2,901; 3,666; 3,859; 3,877; 3,921
6. 1,211,501
7. 62,089
8. tens
9. ten thousands
10. 50
11. 130
12. 90
13. 100
14. 600
15. 1,900
16. 100
17. 7,900
18. 55,000
19. 809,000
20. 1,000

Page 16

1. 81
2. 81
3. 54
4. 73
5. 792
6. 902
7. 950
8. 963
9. 4,632
10. 8,358
11. 6,288
12. 9,628
13. 90 minutes
14. 648 apples



Page 17

1. 961
2. 1,261
3. 790
4. 1,243
5. 4,110
6. 9,911
7. 5,220
8. 9,910
9. $563 + 447 = 1,010$ mousetraps
10. $1,599 + 2,735 = 4,334$ jokes

Page 18

1. 112
2. 120
3. 109
4. 1,273
5. 507
6. 1,180
7. 14,372
8. 1,811
9. 207
10. 599
11. 2,987
12. $250 + 97 + 453 = 800$ pages



Page 19

1. 17
2. 36
3. 6
4. 454
5. 529
6. 380
7. 26
8. 35
9. 232
10. $72 - 58 = 14$ inches
11. $456 - 182 = 274$ pages



Page 20

1. 387
2. 7,452
3. 5,338
4. 247
5. 466
6. 2,148
7. 1,809
8. 5,999
9. 857
10. 4,907
11. 5,717
12. 989

Page 21

1. ~~602~~
2. ~~400~~
3. ~~7,005~~
4. ~~4,000~~
5. 87
6. 379
7. 271
8. 447
9. 1,321
10. 6,577
11. 4,341
12. 4,722
13. $1810 - 1521 = 289$ years



Page 22

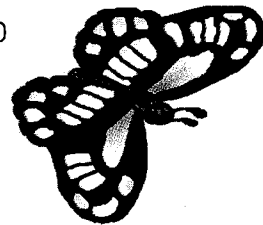
1. $\begin{array}{r} 440 \\ +320 \\ \hline 760 \end{array}$
 2. 885
 3. 7,013
 4. 1,575
 5. 2 tens 17 ones
 6. 2,329
- AZTECS

Page 23

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

Page 24

1. 60
2. 4,900
3. 8,000
4. 100
5. 1,000
6. 10,000
7. 140
8. 1,800
9. 12,000
10. 400
11. 1,600
12. 4,900
13. 18,000
14. 30,000
15. 560,000
16. 600
17. 80
18. 140
19. 180
20. 360
21. 0



Page 25

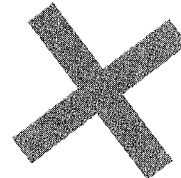
1. 232
2. 102
3. 584
4. 414
5. 644
6. 816
7. 6,797
8. 762
9. 3,248
10. 4,952
11. 4,566
12. 8,628
13. 55,026
14. 24,920
15. 37,107
16. $7 \times 24 = 168$ hours
17. $472 \times 2 = 944$ miles

Page 26

1. 48
2. 728
3. 248
4. 213
5. 3,577
6. 2,439
7. 1,648
8. 2,196
9. 14,624
10. 15,396
11. 18,282
12. 24,888
13. $42 \times 4 = 168$ feet
14. $410 \times 6 = 2,460$ people

Page 27

1. 2,800
2. 4,808
3. 1,510
4. 2,427
5. 14,014
6. 28,200
7. 16,014
8. 45,540
9. $8 \times \$205 = \$1,640$
10. $170 \times 5 = 850$ miles



Answer Key

Page 28

660; 3,020; 825; 5,664
6,510; 2,586; 6,102; 2,664
3,220; 3,885; 5,328; 792
3,775; 2,520; 3,680; 14,180
THE MISSOURI RIVER

Page 29

1. 338 2. 4,560 3. 2,272
4. 4,956 5. 7,872 6. 13,680 7. 14,252 8. 38,270

Page 30

1. 950 2. 3,010 3. 6,084 4. 6,030
5. 7,872 6. 13,680 7. 14,252 8. 38,270
9. $32 \times 24 = 768$ seats
10. $12 \times 35 = 420$ inches
11. $60 \times 24 = 1,440$ minutes
12. $20 \times 12 \times 3 = 720$ eggs

Page 31

1. 5	2. 3	3. 6	4. 1	5. 2	6. 8	7. 5	8. 2	
9. 7	5	0		10. 4	1	2	9	
11. 5	0	1		12. 9	5	1	5	
			13. 6	0	6		14. 8	0
15. 1	4	1	9	7			8	

Page 32

1. 3 R4 2. 5 R1
4. 7 R1 5. 8 R7
7. 8 R3 8. 7 R7

3. 1 R2
6. 5 R4
9. 6 R5

Page 33

1. 22 R3 2. 14 R5 3. 25
4. 12 5. 31 R1 6. 19 R1
7. 12 R3 8. 19 9. 10 R7 10. 23 11. 19 R4



Page 34

1. 300 2. 30 3. 100 4. 40 5. 200
6. 251 7. 34 R3 8. 125 R1 9. 41 R5 10. 227 R2
11. 128 R3 12. 88 13. 28 R3 14. 118 15. 84 R6

Page 35

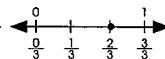
1. 200 2. 20 3. 100 4. 30 5. 300
6. 205 R1 7. 20 R2 8. 109 9. 30 R1 10. 320 R2
11. 20 R3 12. 130 R2 13. 70 R4 14. 207 R2 15. 150 R5

Page 36

1. 3	2. 8	3. 7	4. 9	5. 3
6. 8	3	4	7. 1	7
1		8. 9	9. 5	7
10. 5	6		0	3
	11. 1	4	12. 6	
13. 6			14. 4	15. 9
16. 2	4	6	8	6
17. 4	8		18. 1	6
			3	

Page 37

1. $\frac{5}{8}$ 2. $\frac{5}{6}$ 3. $\frac{7}{10}$
4. $\frac{7}{12}$ 5. $\frac{2}{3}$ 6. $\frac{3}{8}$
7. $\frac{2}{5}$ 8. $\frac{5}{9}$ 9. $\frac{11}{12}$
10. $\frac{5}{6}$ 11. $\frac{3}{4}$ 12. $\frac{2}{3}$



Page 38

1. $\frac{2}{3} = \frac{4}{6}$ 2. $\frac{3}{4} = \frac{6}{8}$ 3. $\frac{2}{5} = \frac{4}{10}$
4. $\frac{5}{6} = \frac{10}{12}$ 5. $\frac{2}{3} = \frac{6}{9}$ 6. $\frac{1}{6} = \frac{2}{12}$
7. $\frac{2}{3} = \frac{10}{15}$ 8. $\frac{3}{8} = \frac{6}{16}$ 9. $\frac{1}{2} = \frac{6}{12}$ 10. $\frac{8}{12} = \frac{2}{3}$



Page 39

1. $\frac{1}{4}$ 2. yes 3. yes 4. $\frac{1}{3}$
5. $\frac{1}{2}$ 6. yes 7. yes 8. $\frac{2}{5}$
9. $\frac{1}{2}$ 10. $\frac{1}{2}$ 11. $\frac{3}{4}$ 12. $\frac{1}{4}$
13. $\frac{2}{5}$ 14. $\frac{1}{3}$ 15. $\frac{1}{2}$ 16. $\frac{3}{4}$
17. $\frac{2}{3}$ 18. $\frac{1}{2}$ 19. 1 20. 0

Challenge: A fraction is equivalent to $\frac{1}{2}$ if the denominator is twice as great as the numerator.

Page 40

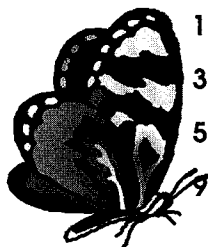
1. $>$ 2. $=$ 3. $<$
4. $\frac{3}{4} > \frac{3}{8}$ 5. $\frac{2}{3} = \frac{8}{12}$ 6. $\frac{1}{3} < \frac{5}{6}$
7. $>$ 8. $=$ 9. $>$ 10. $>$
11. $<$ 12. $>$ 13. $<$ 14. $<$

Page 41

1. $\frac{3}{8} + \frac{1}{8} = \frac{4}{8} = \frac{1}{2}$ 2. $\frac{4}{6} - \frac{2}{6} = \frac{2}{6} = \frac{1}{3}$
3. $\frac{7}{8}$ 4. $\frac{2}{3}$ 5. $\frac{1}{4}$
6. $\frac{1}{2}$ 7. $\frac{1}{3}$ 8. $\frac{4}{5}$
9. $\frac{2}{3}$ 10. 1 11. $\frac{1}{3}$

Page 42

1. $\frac{5}{3} = 1 \frac{2}{3}$ 2. $\frac{14}{10} = 1 \frac{2}{5}$
3. $\frac{8}{6} = 1 \frac{1}{3}$ 4. $\frac{18}{8} = 2 \frac{1}{4}$
5. $1 \frac{1}{4}$ 6. $1 \frac{1}{2}$ 7. 2 8. $1 \frac{1}{4}$
9. 1 10. $2 \frac{1}{4}$ 11. $3 \frac{1}{5}$ 12. $2 \frac{1}{2}$



Answer Key

Page 43

1. $1\frac{1}{4}$ 2. $5\frac{4}{5}$
 3. $5\frac{2}{3}$ 4. $1\frac{5}{7}$
 5. $6\frac{1}{8}$ 6. $2\frac{3}{4}$



Page 46

1. $\frac{7}{10}$, seven-tenths
 2. $\frac{7}{100}$, seven-hundredths
 3. $\frac{70}{100}$, seventy-hundredths
 4. $2\frac{7}{10}$, two and seven-tenths
 5. $1\frac{17}{100}$, one and seventeen-hundredths
 6. $2\frac{71}{100}$, two and seventy-one hundredths

Page 47

1. $\frac{9}{10}$, 0.9 2. $\frac{9}{100}$, 0.09
 3. $1\frac{3}{10}$, 1.3 4. $\frac{31}{100}$, 0.31
 5. 3.8 6. 0.38
 7. 5.07 8. 0.57
 9. tenths 10. ones
 11. hundredths 12. tens

Page 50

1. 9.6 2. 6.88 3. 1.35 4. 8.00 or 8 5. \$33.36
 6. 12.36 7. 15.19 8. 25.87 9. 54.66 10. 6.33
 11. 4.42 12. \$6.36 13. 6.75
 14. 44.88 15. \$15.09 16. 74.37

Page 52

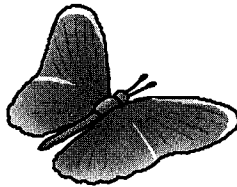
1. D 2. B
 3. C 4. B
 5. A 6. B
 7. D 8. D

Page 53

1. 180 minutes
 2. 64 ounces
 3. 100,000 cm
 4. 2,000 mL

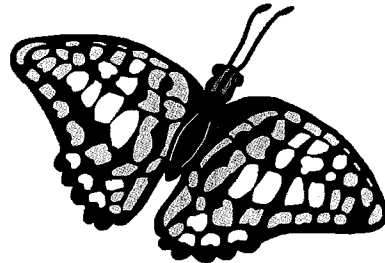
Page 44

1. $\frac{5}{6}$ of the book
 2. $1\frac{2}{3}$ rolls of tickets
 3. $2\frac{7}{8}$ yards
 4. $2\frac{5}{8}$ pizzas
 5. $3\frac{7}{8}$ inches
 6. $3\frac{1}{12}$ miles
 7. $1\frac{3}{4}$ cups of flour
 8. $3\frac{1}{2}$ feet long



Page 45

1. $1\frac{1}{2}$; $3 \times \frac{1}{2} = 1\frac{1}{2}$ 2. $1\frac{1}{2}$; $4 \times \frac{3}{8} = 1\frac{1}{2}$
 3. $\frac{2}{5}$; $2 \times \frac{1}{5} = \frac{2}{5}$ 4. $4\frac{2}{7}$; $5 \times \frac{6}{7} = 4\frac{2}{7}$
 5. $\frac{2}{9}$; $\frac{1}{9} + \frac{1}{9} = \frac{2}{9}$ 6. $3\frac{3}{4}$; $\frac{5}{4} + \frac{5}{4} + \frac{5}{4} = 3\frac{3}{4}$



Page 48

1. 0.70, seventy hundredths
 0.7, seven tenths
 2. 2.10, two and ten hundredths
 2.1, two and one tenth
 3. 0.90 4. 0.20 5. 3.60 6. 5.00
 7. 1.4 8. 0.6 9. 7.3 10. cannot do

Page 49

1. > 2. < 3. <
 4. = 5. > 6. <
 7. < 8. < 9. =
 10. 0.38; 0.83; 3.8; 8.3
 11. 0.15; 1.05; 1.5; 15
 12. 0.07; 0.7; 7; 70.0
 13. 0.02; 0.2; 0.22; 2.0
 14. 34.61; 346.01; 346.1; 3,461

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1. 6.8 2. 0.68 3. 5.71 4. \$3.46 5. \$4.51
 6. 2.7 7. 5.3 8. \$15.17
 9. 5.15 10. 8.28 11. \$11.99
 12. 84.3 acres 13. \$4.61

Page 54

1. 1,250 m 2. 168 in
 3. 58 in 4. taller, 1 in
 5. $\$ \frac{83}{100}$, \$0.83 6. \$2.25
 7. 70 cm

Page 55

1. perimeter 26 in
 area 42 in²
 2. perimeter 24 ft
 area 20 ft²
 3. length 11 ft


Page 56

1. $\frac{1}{2}$ in
 2. $\frac{3}{2}$ in or $1\frac{1}{2}$
 3. $\frac{5}{4}$ in or $1\frac{1}{4}$
 4. $\frac{11}{8}$ in or $1\frac{3}{8}$
 5. 10 in


Page 57

1. measure = 90° 2. measure = 120°
 3. measure = 180° 4. measure = 30°

Page 58

1. 
 2. C and D
 3. A and C or B and D
 4. C and D
 5. J
 6. acute

Page 59

1. yes 2. yes
 3. no 4. no
 5. yes 6. no
 7. 

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GREAT JOB!



Name _____

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