Division

Theoring 6

Add, subtract, multiply or divide to fill in the cross-number puzzle.

# **Across**

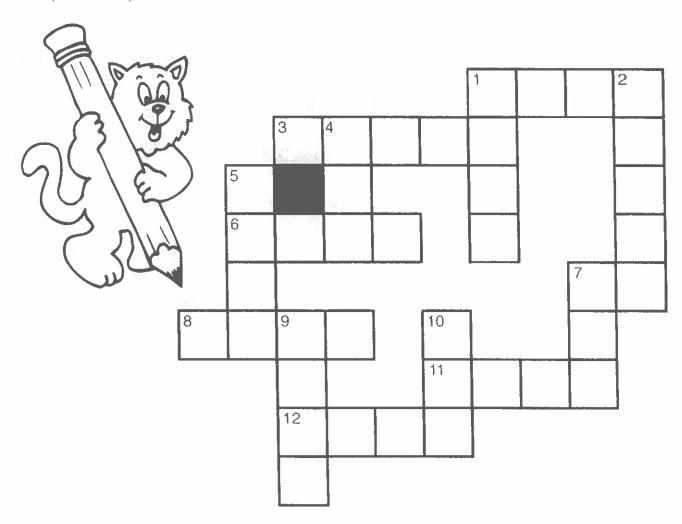
6. 
$$134 \times 52 =$$

11. 
$$1,806 \times 4 =$$

## **Down**

4. 
$$4,248 \div 18 =$$

5. 
$$47 \times 36 =$$



When solving an equation with more than one type of operation, it is important to perform the operations in the correct order.

**Example:**  $12 + 15 \div (3 + 2) - 3 \times 2 =$ 

$$12 + 15 \div (3 + 2) - 3 \times 2 = 12 + 15 \div (5) - 3 \times 2$$

$$12 + (15 \div 5) - (3 \times 2) = 12 + (3) - (6)$$

$$12 + 3 - 6 = 9$$

Solve the following equations using the correct order of operations. Match your answer and the letter beside your answer to the number below the blanks. Write the letters in the blanks to solve the riddle.

1. 
$$(2 \times 4) \div 2 \times 7 + 5 =$$

**2.** 
$$14 + 6 \times 4 - 3 =$$

$$= w$$

3. 
$$72 \div 9 - 6 + 18 \div 9 =$$

$$= g$$

**4.** 
$$15 + (7 + 2) \div 3 + 6 \times 3 =$$

$$= n$$

**5.** 
$$(3 \times 8) - 6 + (24 \div 6) =$$

**6.** 
$$(81 \div 9) \div (3 \times 1) + 10 =$$

7. 
$$(35 + 13) \div 8 = = d$$

$$= 0$$

8. 
$$3 + (28 - 3) \div 5 + (2 \times 4) =$$

**9.** 
$$(9 \times 5) \div (3 + 6) =$$

**10.** 
$$(64 \div 8) + (3 \times 4) + 8 =$$

$$= v$$

11. 
$$8 \times 2 \div 2 + 24 =$$

16

21

36

**12.** 
$$16 \div 4 + 7 + 2 \times 5 =$$

Why did the cowboy buy a dachshund?



36

21

13

Skill: Changing Fractions to Simplest Form

Name

Solve the riddle.

What do you call cheese that is not yours?



To solve the riddle:

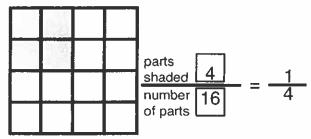
Each box below has a fraction and a letter. Reduce the fraction in each box to simplest form. If the fraction, when changed to simplest form, matches one of the fractions listed in the fraction box, cross out that box. If it does not match a fraction listed in the fraction box, circle the letter. As you circle letters, write them in the blanks. When you are finished, you will have the answer to the riddle.

Fraction Box

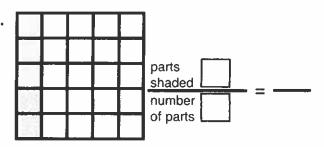
1/3	<u>2</u> -	7 8	5 8 3 13	<u>7</u> 10	3 4	<u>6</u> 7	<u>3</u> 5
3	6	15	<u>15</u>	6	28	36	4
9	21	20	18	9	32	42	10
N	s	P	A	N	R	T	A
6	14	<u>6</u>	10	24	4	<u>10</u>	<u>9</u>
20	20	27	35	39	16	12	24
c	E	н	A	L	0	0	C
10 14 H	18 21	8 16 E	<u>16</u> 24 E	14 16 s	<u>15</u> 36 s	<u>4</u> 12 E	4 18 E

For each shape below, fill in the number of total parts of the shape and the number of parts shaded in. Reduce the fraction to simplest form. The first one has been done for you.

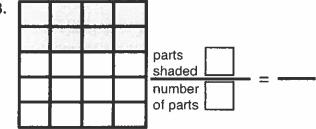
1.



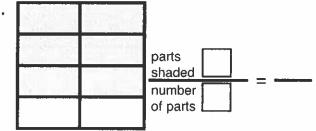
2.



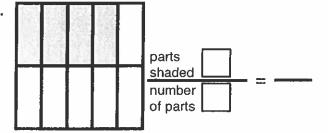
3.



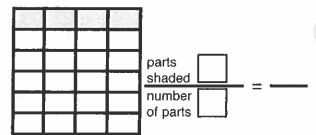
4.



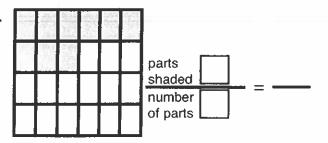
5.



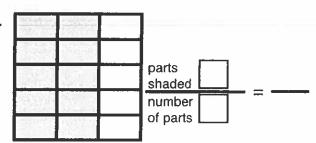
6.



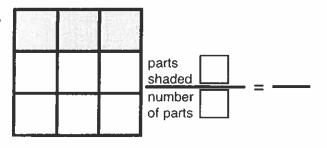
7.



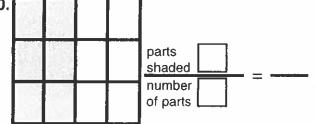
8.



9.



10.



#### Name

Solve the riddles by subtracting the fractions. Use the answers and the letters beside each answer to fill in the blanks and solve the riddles.

## 1. What does juice get when it is cold?

$$\frac{7}{8} \cdot \frac{1}{4} = \mathbf{c} \qquad \frac{4}{9} \cdot \frac{1}{4} = \mathbf{e} \qquad \frac{7}{8} \cdot \frac{5}{12} = \mathbf{s}$$

$$\frac{1}{2} \cdot \frac{1}{3} = \mathbf{j} \qquad \frac{3}{4} \cdot \frac{1}{4} = \mathbf{e} \qquad \frac{5}{6} \cdot \frac{1}{5} = \mathbf{p}$$

$$\frac{1}{5} \cdot \frac{1}{8} = \mathbf{u} \qquad \frac{1}{4} \cdot \frac{1}{6} = \mathbf{e} \qquad \frac{1}{6} \cdot \frac{1}{9} = \mathbf{m}$$

	*****								
1	3	1	5	7	<u>1</u>	3	1_	19	<u>11</u>
6	<del>40</del>	2	8	36	12	40	18	30	24

### 2. Where does water get money from?

$$\frac{11}{12} \cdot \frac{1}{6} = \mathbf{a} \quad \frac{3}{4} \cdot \frac{1}{5} = \mathbf{a} \quad \mathbf{i} \quad \frac{2}{3} \cdot \frac{1}{9} = \mathbf{b} \quad \frac{1}{3} \cdot \frac{1}{6} = \mathbf{n}$$

$$\frac{3}{8} \cdot \frac{1}{3} = \mathbf{v} \quad \frac{3}{4} \cdot \frac{1}{2} = \mathbf{e} \quad \frac{9}{10} \cdot \frac{5}{7} = \mathbf{r} \quad \frac{1}{5} \cdot \frac{1}{8} = \mathbf{k}$$

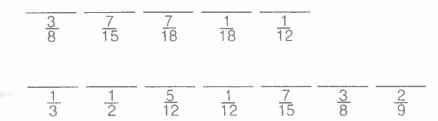
$\frac{1}{4}$ $\frac{13}{70}$ $\frac{5}{9}$ $\frac{3}{4}$ $\frac{1}{6}$ $\frac{3}{40}$	1 <u>3</u> 70	1 4	<u>1</u> = 24	1 <u>1</u> 20	13 70	34
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# 3. What is green and sings?

$$\frac{2}{3} \cdot \frac{1}{6} = \mathbf{a} \qquad \frac{7}{12} \cdot \frac{1}{4} = \mathbf{p} \qquad \frac{8}{9} \cdot \frac{1}{2} = \mathbf{v}$$

$$\frac{8}{9} \cdot \frac{5}{6} = \mathbf{i} \qquad \frac{5}{12} \cdot \frac{1}{3} = \mathbf{s} \qquad \frac{4}{5} \cdot \frac{1}{3} = \mathbf{l}$$

$$\frac{2}{3} \cdot \frac{4}{9} = \mathbf{y} \qquad \frac{7}{8} \cdot \frac{1}{2} = \mathbf{e} \qquad \frac{3}{4} \cdot \frac{1}{3} = \mathbf{r}$$



In each box, there are two fractions that, when multiplied, equal another number in the box. Draw a box around the two fractions that can be multiplied to equal the third fraction. Draw a circle around the fraction that equals the product of the other two fractions.

Example:

<u>2</u> 5	3 4
<u>5</u> 7	3 10

$$\frac{2}{5} \times \frac{3}{4} = \frac{3}{10}$$

1. <u>2</u> <u>8</u> 21 <u>8</u> 10 <u>4</u> 7

2.	1/4	1 3
	38	3

3.	3 9	<u>5</u> 18
	<u>1</u>	1 2

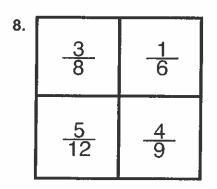
 4.
 7/8
 3/8

 1/2
 3/4

5.	<u>2</u> 7	<u>3</u> 7
	<u>4</u> 5	<u>8</u> 35

6.	1 3	<u>1</u> 5		
	<u>3</u> 5	2 3		

7. 4 5 6 5 9 2 3



9.	<u>5</u> 14	1/3
	<u>5</u> 8	4 7

Skill: Changing Mixed Numbers to Improper Fractions

Name

Find and circle all of the pairs of equivalent mixed numbers and improper fractions that are side by side. Pairs of equivalent mixed numbers and improper fractions may go either horizontally or vertically. The first two have been circled for you.

13 5	$2\frac{3}{5}$	3 <del>3</del> 10	15 10	$2\frac{2}{7}$	<u>16</u> 7	137	9 7
1 <u>5</u>	14 13	<u>30</u> 10	1 1 2	3 2/3	13	<u>8</u> 5	1 2 7
<u>15</u> 12	1 1 1 1 1 1 1 1 1	<u>36</u> 11	3 3 11	11 3	3 1/3	3 <del>5</del> 7	<u>26</u> 7
1 1 4	9	$4\frac{1}{4}$	<u>19</u> 8	2 3 8	<u>12</u> 5	5 2 5	<u>25</u> 5
7 2	$3\frac{1}{2}$	5 5 8	<u>45</u> 8	<u>19</u> 8	2 2 5	<u>28</u> 5	4 5 7
$2\frac{3}{20}$	<u>49</u> 20	$2\frac{5}{20}$	$6\frac{3}{5}$	<u>33</u> 5	<u>42</u> 16	5 <del>3</del> 5	<u>30</u> 7
<u>43</u> 20	$2\frac{4}{7}$	<u>18</u> 7	3 2 7	O .	<u>49</u> 6	<u>25</u> 6	$4\frac{2}{7}$
37/12	<u>43</u> 12	3 <sup>5</sup> / <sub>7</sub>	<u>27</u> 7	3 6 7	<u>18</u> 11	3 7/10	<u>37</u> 10

# Divide the fractions in each box. The answer to the trivia question is beside the correct answer to the division problem.

1. What does the word "dinosaur" mean?

$$\frac{2}{3} \div \frac{3}{4} =$$

$$\frac{8}{9}$$
 = terrible lizard  $\frac{2}{9}$  = long neck

$$\frac{1}{3}$$
 = large feet

$$\frac{1}{3}$$
 = large feet  $\frac{5}{12}$  = thick skin

2. What is one piece of confetti called?

$$\frac{2}{9} \div \frac{1}{3} =$$

$$\frac{3}{4}$$
 = unifetti

$$\frac{3}{4}$$
 = unifetti  $\frac{5}{6}$  = monofett

$$\frac{2}{3}$$
 = confetto

$$\frac{2}{3}$$
 = confetto  $\frac{7}{8}$  = confettae

3. From what language does the word "bologna" originate?

$$\frac{5}{8} \div \frac{1}{6} =$$

$$3\frac{3}{4}$$
 = Italian

$$3\frac{3}{4}$$
 = Italian  $4\frac{1}{4}$  = German

$$\frac{1}{3}$$
 = Spanish

$$\frac{1}{3}$$
 = Spanish  $2\frac{1}{3}$  = French

4. Which of the following superheros has no superhuman powers?

$$\frac{4}{5} \div \frac{3}{10} =$$

$$1\frac{1}{8}$$
 = superman

$$1\frac{1}{8}$$
 = superman  $2\frac{1}{3}$  = spiderman

$$3\frac{2}{3}$$
 = aquaman  $2\frac{2}{3}$  = batman

$$2\frac{2}{3}$$
 = batman

5. About what percentage of the earth's surface is covered with water?

$$\frac{2}{5} \div \frac{1}{3} =$$

$$1\frac{7}{8} = 50$$

$$1\frac{7}{8} = 50$$
  $1\frac{1}{5} = 70$ 

$$2\frac{3}{5} = 30$$

$$2\frac{2}{3} = 25$$

6. Up to how many miles per hour can a crocodile move in water?

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

$$\frac{1}{8}$$
 = 25 mph

$$\frac{1}{8}$$
 = 25 mph  $\frac{1}{5}$  = 10 mph

$$\frac{7}{9}$$
 = 5 mph

$$\frac{7}{9} = 5 \text{ mph} \qquad \frac{1}{4} = 20 \text{ mph}$$

7. About how many glasses of milk does the average cow produce in its lifetime?

$$\frac{3}{8} \div \frac{4}{5} =$$

$$\frac{3}{10}$$
 = 10,000  $\frac{13}{17}$  = 2,500

$$\frac{13}{17}$$
 = 2,500

$$\frac{15}{32}$$
 = 200,000  $\frac{5}{6}$  = 30,000

$$\frac{5}{6}$$
 = 30,000

8. Which of the following makes up about 16% of your body weight?

$$\frac{3}{5} \div \frac{9}{10} =$$

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

$$\frac{1}{5}$$
 = bones  $\frac{1}{3}$  = muscles

$$\frac{2}{3}$$
 = ski

$$\frac{2}{3}$$
 = skin  $\frac{7}{8}$  = water

Solve the word problems.

1. Everyday Sally rides her bike to get where she wants to go. Today she rode  $3\frac{3}{4}$  miles to get to school. Then she rode  $1\frac{5}{8}$  miles to get to the library. After that, she rode  $4\frac{1}{3}$  miles to get back home. How many miles did she ride in all?

Show your work here

2. For Paul to make his famous double chocolate cake, he uses  $1\frac{1}{2}$  cups of water.  $2\frac{1}{4}$  cups of milk and  $\frac{5}{8}$  of a cup of oil. How many cups of these liquid ingredients does he use in all?

Show your work here.

Tonya bought three pizzas for herself and her friends. Sharon ate  $\frac{5}{6}$  of a pizza, Sondra ate  $\frac{2}{3}$  of a pizza, and Tonya ate  $\frac{3}{8}$  of a pizza. How much of the pizzas did the girls eat all together?

Show your work here.

4. Mark decided to help his father do some yard work. He spent  $1\frac{1}{3}$  hours cutting grass,  $1\frac{1}{4}$  hours raking leaves, and  $\frac{5}{8}$  of an hour putting away the yard tools. How much time did he spend all together helping his father?

Show your work here

Add the fractions. Match your answers with the number below the blanks in the answer to the riddle. Write the letter beside your answer in the blank to get the answer to the riddle.

1. 
$$\frac{5}{14} + \frac{1}{2} = = = i$$

2. 
$$\frac{1}{4} + \frac{3}{8} = = = s$$

3. 
$$\frac{1}{4} + \frac{1}{5} = = = h$$

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

5. 
$$\frac{1}{10} + \frac{1}{2} = = u$$

6. 
$$\frac{1}{2} + \frac{3}{10} = = =d$$

7. 
$$\frac{2}{9} + \frac{2}{3} = = r$$

8. 
$$\frac{5}{12} + \frac{1}{4} = = = a$$

9. 
$$\frac{2}{5} + \frac{5}{10} = = n$$

10. 
$$\frac{1}{4} + \frac{1}{2} = = = 0$$

11. 
$$\frac{1}{12} + \frac{3}{4} = = = p$$

12. 
$$\frac{2}{3} + \frac{1}{5} = = m$$

13. 
$$\frac{1}{10} + \frac{3}{5} = = = 1$$

How did the skunk call his family?

$$\frac{9}{20}$$
  $\frac{6}{7}$   $\frac{5}{8}$