

HOMWORK

Write each mathematical expression as a word phrase.

1. $46.7(61)$ 46.7 multiplied by 61 2. $\frac{125}{a}$ 125 divided by a
 3. $37 \cdot n$ 37 times n 4. $\frac{96}{12}$ the quotient of 96 and 12

Write each word phrase as a mathematical expression.

5. twenty-one divided by five $\frac{21}{5}$ 6. the quotient of a number and seven $n \div 7$
 7. thirty-six divided by four $36 \div 4$ 8. one and six tenths divided by p $1.6 \div p$
- Let the number be (n)*

Problem Solving

Write an expression.

9. The pro shop has 261 tennis balls in cans. Each can contains 3 tennis balls. How many cans of tennis balls are there?

$$\frac{261}{3}$$

Caleb buys new reeds for his saxophone. The table for Exercises 10–11 shows the cost for different packages.

Package Size	Cost
Single reed	\$3.29
Small box	\$9.99
Large box	\$27.95

10. Write an expression for the cost of r single reeds.

$$\underline{3.29r}$$

11. Caleb buys the large box of reeds. Write an algebraic expression that shows how much each reed in the large box costs if the box contains k reeds.

$$\underline{\frac{27.95}{k}}$$

Write About It

12. Write a real-world problem scenario that represents the expression $\frac{24}{8}$.

HOMWORK

Evaluate each algebraic expression for $c = 0.6$ and $d = 300$.
Remember to work from left to right.

1. $d \div 20 = \underline{15}$ $20 \overline{) 300} \begin{array}{r} 15 \\ -20 \downarrow \\ 100 \\ -100 \\ 0 \end{array}$

2. $d \div c = \underline{500}$ $0.6 \overline{) 300} \Rightarrow 6 \overline{) 3000} \begin{array}{r} 500 \\ -300 \downarrow \\ 000 \\ -000 \\ 0 \end{array}$

3. $150c \div d = \underline{0.3}$ $150 \times 0.6 = 90$

4. $\frac{d}{7.5} = \underline{40}$ $7.5 \overline{) 300} \Rightarrow 75 \overline{) 3000} \begin{array}{r} 40 \\ -300 \downarrow \\ 000 \\ -000 \\ 0 \end{array}$

$150 \cdot 0.6 \div 300 = 90 \div 300 = \underline{0.3}$ $300 \overline{) 900} \begin{array}{r} 0.3 \\ -90 \downarrow \\ 0 \end{array}$

Problem Solving

Write an algebraic expression for each situation. Then evaluate the expression for the given value.

5. Mrs. Yazzie buys p pairs of identical pants for \$95.44*. Write an algebraic expression that shows the cost of each pair of pants.
* Determine the cost of one pair if she buys 4 pairs of pants.

$95.44 \div p$
 $95.44 \div 4 = \underline{\$23.86}$ $4 \overline{) 95.84} \begin{array}{r} 23.86 \\ -80 \\ 15 \\ -12 \\ 24 \\ -24 \\ 0 \end{array}$ $p=4$

6. Your storage container holds $7\frac{1}{2}$ cups of oatmeal. You are camping for d days and plan to eat the same amount each day*. Write an expression that shows how many cups of oatmeal you can eat each day. Now suppose you decide to bring a second container that holds 5 cups of raisins. Write a new expression that shows the amount of oatmeal plus raisins you can eat in d days of camping. Evaluate the expression if you camp for 10 days.

$7.5 \div d$
 $+ 5.0$
 $12.5 \div d \Rightarrow 12.5 \div 10 = \underline{1.25 \text{ cups}}$

$10 \overline{) 12.50} \begin{array}{r} 1.25 \\ -10 \downarrow \\ 25 \\ -20 \downarrow \\ 50 \\ -50 \\ 0 \end{array}$

Write About It

7. Describe how you would evaluate the expression $\frac{a}{4}$ when $a = 36$. Then evaluate the expression.
