

Evaluate Division Expressions

Evaluate $\frac{806}{p}$, when $p = 7.75$.

$$\frac{806}{p} = \frac{806}{7.75} \quad \text{Substitute 7.75 for } p.$$

$$= 104 \quad \text{Divide.}$$

value of the expression

MORE PRACTICE

Evaluate each expression.

1. z divided by 10, when $z = 50$ 5
 $50 \div 10 = 5$

2. $\frac{78.8}{t}$, when $t = 4$ 19.7
 $78.8 \div 4$

$$\begin{array}{r} 19.7 \\ 4 \overline{) 78.8} \\ \underline{40} \\ 38 \\ \underline{36} \\ 28 \\ \underline{28} \\ 0 \\ \underline{0} \\ 0 \end{array}$$

3. $241.4 \div 3.4$ 71

$$\begin{array}{r} 71. \\ 3.4 \overline{) 241.4} \\ \underline{238} \\ 34 \\ \underline{34} \\ 0 \\ \underline{0} \\ 0 \end{array}$$

4. $\frac{16.2}{t}$, when $t = 3$ 5.4
 $16.2 \div 3$

$$\begin{array}{r} 5.4 \\ 3 \overline{) 16.2} \\ \underline{15} \\ 12 \\ \underline{12} \\ 0 \\ \underline{0} \\ 0 \end{array}$$

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

5. $d \div c \cdot 400$ 200,000

$$\begin{array}{r} 500 \\ 300 \overline{) 30000} \\ \underline{300} \\ 000 \\ \underline{000} \\ 0 \\ \underline{0} \\ 0 \end{array}$$

$$\begin{array}{r} 500 \\ \times 400 \\ \hline 200000 \end{array}$$

6. $d \div 50 \times 7$ 42

$$\begin{array}{r} 6 \\ 50 \overline{) 300} \\ \underline{300} \\ 0 \end{array}$$

$$\begin{array}{r} 6 \times 7 \\ \hline 42 \end{array}$$

7. $24 \div c$ 40
 $24 \div 0.6$

$$\begin{array}{r} 40. \\ 0.6 \overline{) 24.0} \\ \underline{24} \\ 0 \\ \underline{0} \\ 0 \end{array}$$

8. $15 \cdot c \cdot 25$ 225

$$\begin{array}{r} 15 \\ \times 6 \\ \hline 90 \end{array}$$

$$\begin{array}{r} 4 \\ 25 \\ \times 9 \\ \hline 225 \end{array}$$

9. $d \div 15 \times 1000$ 20,000

$$\begin{array}{r} 20 \\ 15 \overline{) 300} \\ \underline{30} \\ 00 \\ \underline{00} \\ 0 \\ \underline{0} \\ 0 \end{array}$$

$$\begin{array}{r} 20 \\ \times 1000 \\ \hline 20000 \end{array}$$

10. $d \cdot 720 \div c$ 360,000

$$\begin{array}{r} 720 \\ \times 3 \\ \hline 216000 \end{array}$$

$$\begin{array}{r} 360000 \\ 0.6 \overline{) 2160000} \\ \underline{180} \\ 36 \\ \underline{36} \\ 00000 \\ \underline{00000} \\ 0 \\ \underline{0} \\ 0 \end{array}$$