

**Multiply (Mixed Numbers).** Reduce to simplest form if possible.

1.  $2\frac{3}{5} \cdot \frac{2}{3} =$

$$\frac{13}{5} \cdot \frac{2}{3} = \boxed{\frac{26}{15}}$$

2.  $\left(\frac{3}{5}\right)\left(-2\frac{1}{4}\right) =$

$$\frac{3}{5} \left(-\frac{9}{4}\right) = \boxed{-\frac{27}{20}}$$

3.  $4\frac{1}{2} \cdot 3\frac{1}{2} =$

$$\frac{9}{2} \cdot \frac{7}{2} = \boxed{\frac{63}{4}}$$

**Divide (Mixed Numbers).** Reduce to simplest form if possible.

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

$$\frac{11}{4} \cdot \frac{3}{4} = \boxed{\frac{33}{16}}$$

5.  $\left(-\frac{3}{5}\right) \div \left(-3\frac{1}{4}\right) =$

$$\left(-\frac{3}{5}\right) \left(-\frac{4}{13}\right) = \boxed{\frac{12}{65}}$$

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

$$\left(-\frac{7}{2}\right) \left(\frac{3}{4}\right) = \boxed{-\frac{21}{8}}$$

**Multiply (Decimals).**

7.  $1.2 \cdot 5 = \boxed{6}$

$$\begin{array}{r} 1.2 \\ \times 5 \\ \hline 6.0 \end{array}$$

8.  $(3.2)(-2.4) = \boxed{-7.68}$

$$\begin{array}{r} 3.2 \\ \times 2.4 \\ \hline 128 \\ 640 \\ \hline 7.68 \end{array}$$

9.  $4 \cdot 0.6 = \boxed{2.4}$

$$\begin{array}{r} 0.6 \\ \times 4 \\ \hline 2.4 \end{array}$$

**Divide (Decimals).**

10.  $4.5 \div 9 = \boxed{0.5}$

$$\begin{array}{r} 9 \overline{)4.5} \\ \underline{45} \\ 0 \end{array}$$

11.  $(12.6) \div (-3) = \boxed{-4.2}$

$$\begin{array}{r} 4.2 \\ -3 \overline{)12.6} \\ \underline{-12} \\ 06 \\ \underline{-6} \\ 0 \end{array}$$

12.  $-10.25 \div 4.1 = \boxed{-2.5}$

$$\begin{array}{r} 4.1 \overline{)10.25} \\ \underline{82} \\ 205 \\ \underline{205} \\ 0 \end{array}$$

**Perform the indicated operation.** Reduce to simplest form if possible.

13.  $2\frac{2}{3} \cdot \frac{5}{6} =$

$$\frac{8}{3} \cdot \frac{5}{6} = \frac{40}{18} = \boxed{\frac{20}{9}}$$

14.  $(-10)(-2.5) = \boxed{25}$

$$\begin{array}{r} 10 \\ \times 2.5 \\ \hline 50 \\ 200 \\ \hline 25.0 \end{array}$$

15.  $\frac{1}{2} \div 1\frac{5}{8} =$

$$\frac{1}{2} \cdot \frac{8}{13} = \boxed{\frac{5}{26}}$$

16.  $\left(-3\frac{2}{3}\right) \div (4) =$

$$\left(-\frac{11}{3}\right) \cdot \left(\frac{1}{4}\right) = \boxed{-\frac{11}{12}}$$

17.  $(18.4) \div (4) = \boxed{4.6}$

$$\begin{array}{r} 4.6 \\ 4 \overline{)18.4} \\ \underline{-16} \\ 24 \\ \underline{-24} \\ 0 \end{array}$$

18.  $\frac{3}{8} \cdot 5\frac{1}{2} =$

$$\frac{3}{8} \cdot \frac{11}{2} = \boxed{\frac{33}{16}}$$

Write a multiplication expression for each situation. Answer the question.

22. Sandra's hair was  $5\frac{1}{3}$  inches long. Her hair dresser cut five-eighths of it off. How many inches of Sandra's hair was cut off?

Expression:  $5\frac{1}{3} \cdot \frac{5}{8}$        $\frac{16}{3} \cdot \frac{5}{8}$       Answer:  $\frac{80}{24} = \frac{10}{3}$  inches

23. The temperature increased  $2\frac{4}{5}$  of a degree per hour for six hours. How many degrees did the temperature raise after six hours?

Expression:  $2\frac{4}{5}(6)$        $\frac{14}{5} \cdot \frac{6}{1}$       Answer:  $\frac{84}{5}$  degrees

24. Jim was deep sea diving last week. He descends 1.7 of a meter every minute. How many meters will he descend in 10 minutes?

Expression:  $-1.7(10)$        $\begin{array}{r} 1.7 \\ \times 10 \\ \hline 17.0 \end{array}$       Answer:  $-17$  meters

Write a division expression for each situation. Answer the question.

25. Mr. Brust has  $2\frac{1}{4}$  pounds of candy from Halloween. He splits the candy into 4 piles. How much does each pile weigh?

Expression:  $\frac{9}{4} \div 4$        $\frac{9}{4} \cdot \frac{1}{4}$       Answer:  $\frac{9}{16}$  pounds

26. The temperature fell 9 degrees over 1.5 of an hour. What was the average change in temperature per hour?

Expression:  $-9 \div 1.5$        $\begin{array}{r} 0.6 \\ 1.5 \overline{) 9.0} \\ \underline{-9.0} \\ 0 \end{array}$       Answer:  $0.6$  degrees

27. Max lost 24 pounds in  $2\frac{1}{2}$  of a month on his new weight-loss plan. What was his average change in weight per month?

Expression:  $(-24)(\frac{1}{2})$        $-\frac{24}{1} \cdot \frac{1}{2}$       Answer:  $-\frac{120}{2} = -60$  pounds