

**LESSON**  
**7-4** **Homework and Practice**  
**Solving Proportions**

Tell whether each pair of ratios are proportional.

1.  $\frac{5}{6} \stackrel{?}{=} \frac{30}{36}$   
\_\_\_\_\_

2.  $\frac{8}{20} \stackrel{?}{=} \frac{6}{14}$   
\_\_\_\_\_

3.  $\frac{12}{27} \stackrel{?}{=} \frac{8}{18}$   
\_\_\_\_\_

4.  $\frac{13}{15} \stackrel{?}{=} \frac{39}{45}$   
\_\_\_\_\_

5.  $\frac{8}{16} \stackrel{?}{=} \frac{50}{100}$   
\_\_\_\_\_

6.  $\frac{21}{49} \stackrel{?}{=} \frac{14}{36}$   
\_\_\_\_\_

7.  $\frac{18}{24} \stackrel{?}{=} \frac{9}{15}$   
\_\_\_\_\_

8.  $\frac{4}{18} \stackrel{?}{=} \frac{18}{81}$   
\_\_\_\_\_

9.  $\frac{16}{10} \stackrel{?}{=} \frac{26}{20}$   
\_\_\_\_\_

10.  $\frac{24}{14} \stackrel{?}{=} \frac{36}{21}$   
\_\_\_\_\_

11.  $\frac{25}{16} \stackrel{?}{=} \frac{5}{4}$   
\_\_\_\_\_

12.  $\frac{17}{11} \stackrel{?}{=} \frac{51}{33}$   
\_\_\_\_\_

Solve each proportion.

13.  $\frac{4}{15} = \frac{a}{45}$   
\_\_\_\_\_

14.  $\frac{16}{18} = \frac{8}{w}$   
\_\_\_\_\_

15.  $\frac{m}{11} = \frac{32}{44}$   
\_\_\_\_\_

16.  $\frac{12}{t} = \frac{4}{7}$   
\_\_\_\_\_

17.  $\frac{9}{b} = \frac{27}{72}$   
\_\_\_\_\_

18.  $\frac{x}{36} = \frac{21}{27}$   
\_\_\_\_\_

19.  $\frac{6}{y} = \frac{18}{51}$   
\_\_\_\_\_

20.  $\frac{10}{32} = \frac{15}{x}$   
\_\_\_\_\_

21.  $\frac{45}{81} = \frac{n}{27}$   
\_\_\_\_\_

22.  $\frac{28}{21} = \frac{44}{t}$   
\_\_\_\_\_

23.  $\frac{d}{42} = \frac{49}{147}$   
\_\_\_\_\_

24.  $\frac{17}{r} = \frac{102}{78}$   
\_\_\_\_\_

25. The Orlemann family planted 3 rows of corn this year and harvested 270 ears. How many rows should they plant if they want to harvest 360 ears of corn?
- \_\_\_\_\_

26. Find the number of times a heart beats in 2 minutes if it beats 576 times in 8 minutes.
- \_\_\_\_\_

27. David is making chocolate-chip cookies. Chocolate chips cost \$1.79 for 12 ounces. David buys 60 ounces of chocolate chips for the cookies. How much did the chocolate chips cost?
- \_\_\_\_\_

**LESSON**  
**7-4 Homework and Practice**  
**Solving Proportions**

Tell whether each pair of ratios are proportional.

1.  $\frac{5}{6} \stackrel{?}{=} \frac{30}{36}$

yes

2.  $\frac{8}{20} \stackrel{?}{=} \frac{6}{14}$

no

3.  $\frac{12}{27} \stackrel{?}{=} \frac{8}{18}$

yes

4.  $\frac{13}{15} \stackrel{?}{=} \frac{39}{45}$

yes

5.  $\frac{8}{16} \stackrel{?}{=} \frac{50}{100}$

yes

6.  $\frac{21}{49} \stackrel{?}{=} \frac{14}{36}$

no

7.  $\frac{18}{24} \stackrel{?}{=} \frac{9}{15}$

no

8.  $\frac{4}{18} \stackrel{?}{=} \frac{18}{81}$

yes

9.  $\frac{16}{10} \stackrel{?}{=} \frac{26}{20}$

no

10.  $\frac{24}{14} \stackrel{?}{=} \frac{36}{21}$

yes

11.  $\frac{25}{16} \stackrel{?}{=} \frac{5}{4}$

no

12.  $\frac{17}{11} \stackrel{?}{=} \frac{51}{33}$

yes

Solve each proportion.

13.  $\frac{4}{15} = \frac{a}{45}$

 $a = 12$ 

14.  $\frac{16}{18} = \frac{8}{w}$

 $w = 9$ 

15.  $\frac{m}{11} = \frac{32}{44}$

 $m = 8$ 

16.  $\frac{12}{t} = \frac{4}{7}$

 $t = 21$ 

17.  $\frac{9}{b} = \frac{27}{72}$

 $b = 24$ 

18.  $\frac{x}{36} = \frac{21}{27}$

 $x = 28$ 

19.  $\frac{6}{y} = \frac{18}{51}$

 $y = 17$ 

20.  $\frac{10}{32} = \frac{15}{x}$

 $x = 48$ 

21.  $\frac{45}{81} = \frac{n}{27}$

 $n = 15$ 

22.  $\frac{28}{21} = \frac{44}{t}$

 $t = 33$ 

23.  $\frac{d}{42} = \frac{49}{147}$

 $d = 14$ 

24.  $\frac{17}{r} = \frac{102}{78}$

 $r = 13$ 

25. The Orlemann family planted 3 rows of corn this year and harvested 270 ears. How many rows should they plant if they want to harvest 360 ears of corn?

**4 rows**

26. Find the number of times a heart beats in 2 minutes if it beats 576 times in 8 minutes.

**144 times**

27. David is making chocolate-chip cookies. Chocolate chips cost \$1.79 for 12 ounces. David buys 60 ounces of chocolate chips for the cookies. How much did the chocolate chips cost?

**\$8.95**