$\qquad$


Period $\qquad$

# Proportion Word Problems 

Solve each proportion.

1) $\frac{5}{6}=\frac{f}{12}$
2) $\frac{x}{18}=\frac{2}{3}$
3) $\frac{30}{k}=\frac{15}{18}$
4) $\frac{4}{5}=\frac{s}{25}$
5) Tell if the two ratios form a proportion:
a) $\frac{1}{2}$ and $\frac{14}{28}$
b) $\frac{6}{8}$ and $\frac{4}{3}$
c) $\frac{8}{18}$ and $\frac{20}{45}$

Solve each proportion:
6) $\mathbf{1}$ subscription for $\$ 21$

28 subscriptions for $x$ dollars
7) 1 gallon of water weighs $8 \frac{1}{3}$ pounds

30 gallons of water weighs $x$ pounds
8) $\frac{1}{4}$ in represents 1 meter $\frac{4}{5}$ in represents $x$ meters
9) 25 cm . by 35 cm . enlarged to 150 cm . by $x$ cm.
10) 18 ozs. of iced tea costs $\mathbf{\$ 2 . 9 9}$. How much will 30 ozs. cost?
11) Paula jogged 10.8 miles in 2 hours. How far will she jog in 15 hours?
12) If a 10-pound turkey takes 4 hours to cook, how long will it take a 14pound turkey to cook?
13)Three loaves of bread cost $\mathbf{\$ 2 . 4 3}$. How much do 2 loaves cost?
14) Tell if the two ratios form a proportion.
a) $\frac{3}{10}$ and $\frac{15}{25}$
b) $\frac{7}{8}$ and $\frac{15}{18}$
c) $\frac{20}{1.5}$ and $\frac{60}{4.5}$
15) If 2 liters of Gatorade cost $\$ 3.98$, how much do 8 liters cost?
16) A copying machine can reduce the size of the material being copied. A diagram measuring 16 cm . wide by 20 cm . Iong is reduced. If the diagram of the reduced copy is 15 cm . Iong, what is its width?
17) In 7 hours of driving, Vince traveled 364 kilometers. If he travels at the same rate, what distance will he have driven in 12 hours?
18) An employee's wages are directly proportional to the number of hours worked. One employee earns $\$ 120$ for working 5 hours. How much will that employee earn for working 8 hours?
19)There are 6 counselors for every 50 campers at a summer camp. The camp has 21 counselors. Find the number of campers.
20) Shirley paid $\mathbf{\$ 1 2 . 7 2}$ for 8 cans of frozen orange juice to make a punch for a party. Elliott bought 10 cans of the same brand of orange juice to make punch for another party. How much did Elliott pay for the juice?
21) You estimate you will take 75 minutes to bike 15 miles to the state park. After 30 minutes, you have traveled 5 miles. Are you on schedule? Explain.
22)A recipe for fruit salad serves 4 people. It calls for $2 \frac{1}{2}$ noranges and 16 grapes. You want to serve 11 people. How many oranges and how many grapes will you need?

