

Proportions Test Review

★ Be sure to write out your proportion WITH labels for each problem! ★

1. Marcia pays \$32.40 for 2.4 pounds of steak. What is the price per pound of the steak?

$$\frac{\$32.40}{2.4 \text{ lbs}} = \frac{\$X}{1 \text{ lb}}$$

÷2.4

$$2.4 \overline{)32.40}$$

$$\begin{array}{r} 13.5 \\ 24 \overline{)324.0} \\ \underline{-24} \\ 84 \\ \underline{-72} \\ 120 \\ \underline{-120} \\ 0 \end{array}$$

\$13.50
per
lb

2. Grace uses 6 ounces of peanut butter to make 36 peanut butter cookies. Last week she made 432 peanut butter cookies. How many ounces of peanut butter did Grace use to make the cookies last week?

$$\frac{6 \text{ oz}}{36 \text{ pbc}} = \frac{X \text{ oz}}{432 \text{ pbc}}$$

÷6

$$6 \overline{)432}$$

72 ounces
of butter

3. A ship travels 30 miles in 1 hour. At this rate, how many miles will it travel in half of an hour?

$$\frac{30 \text{ mi}}{1 \text{ hr}} = \frac{X \text{ mi}}{0.5 \text{ hr}}$$

÷2

15 miles

4. There are 128 slices of pizza in 16 pizzas. If there are the same number of slices in each pizza, how many slices of pizza are in 6 pizzas? *simplify this first*

$$\frac{8 \text{ slices}}{1 \text{ pizza}} = \frac{128 \text{ slices}}{16 \text{ pizzas}} = \frac{X \text{ slices}}{6 \text{ pizzas}}$$

x6

$$\frac{128 \div 4}{16 \div 4} = \frac{32 \div 4}{4 \div 4} = \frac{8}{1}$$

48 slices

5. Kendra shot a total of 48 free throws at basketball practice on Tuesday. For every 18 free throw shots she took, she made 12. How many free throws did Kendra make in practice?

$$\frac{3 \text{ taken}}{2 \text{ made}} = \frac{18 \text{ taken}}{12 \text{ made}} = \frac{48 \text{ taken}}{X \text{ made}}$$

x16

32 made free
throws

6. Alonzo is a cook at a new restaurant in town. He can make 375 plates of food in 18 hours. At this rate, how many plates of food can Alonzo make in 6 hours?

$$\frac{375 \text{ plates}}{18 \text{ hrs}} = \frac{X \text{ plates}}{6 \text{ hrs}}$$

$\xrightarrow{\div 3}$ $\xrightarrow{\div 3}$
 $\xrightarrow{\div 3}$ $\xrightarrow{\div 3}$

$$3 \overline{) 375}$$

$$\begin{array}{r} 125 \\ - 6 \\ \hline 15 \end{array}$$

125 plates

7. Marissa has a pet setting job this summer. Last week she worked 8 hours and earned \$64.00. This week she is scheduled to work 15 hours. At this rate, how much will you expect Marissa to make this week?

$$\frac{\$8}{1 \text{ hr}} = \frac{\$64}{8 \text{ hrs}} = \frac{\$X}{15 \text{ hrs}}$$

$\xrightarrow{\times 15}$ $\xrightarrow{\times 15}$
 $\xrightarrow{\times 15}$ $\xrightarrow{\times 15}$

simplify first

$$\begin{array}{r} 15 \\ \times 8 \\ \hline 120 \end{array}$$

\$120

8. Every 3 days Mrs. Thompson spends 2.75 hours cleaning the house and 6.5 hours cooking meals. At this rate, how many total hours will Mrs. Thompson spend cleaning the house and cooking meals in 9 days?

$$\frac{9.25 \text{ hrs}}{3 \text{ days}} = \frac{X \text{ hrs}}{9 \text{ days}}$$

$\xrightarrow{\times 3}$ $\xrightarrow{\times 3}$
 $\xrightarrow{\times 3}$ $\xrightarrow{\times 3}$

$$\begin{array}{r} 2.75 \\ + 6.5 \\ \hline 9.25 \end{array}$$

$$\begin{array}{r} 9.25 \\ \times 3 \\ \hline 27.75 \end{array}$$

27.75 hrs

9. A package of 35 hairbands costs \$15.05. At this rate, what is the cost of 1 hairband in dollars and cents?

$$\frac{\$15.05}{35 \text{ hb}} = \frac{\$X}{1 \text{ hb}}$$

$\xrightarrow{\div 35}$ $\xrightarrow{\div 35}$
 $\xrightarrow{\div 35}$ $\xrightarrow{\div 35}$

$$35 \overline{) 15.05}$$

$$\begin{array}{r} .43 \\ - 140 \\ \hline 105 \\ - 105 \\ \hline 0 \end{array}$$

0.43 per hairband

12. Casey spends \$185 every 3 months on grocery bills. At this rate, how much will Casey pay for 2 years on grocery bills?

$$\frac{\$185}{3 \text{ months}} = \frac{\$X}{24 \text{ months}}$$

$\xrightarrow{\times 8}$ $\xrightarrow{\times 8}$
 $\xrightarrow{\times 8}$ $\xrightarrow{\times 8}$

2 years = 24 months

$$\begin{array}{r} 6185 \\ \times 8 \\ \hline 1480 \end{array}$$

\$1,480

13. Diedra is 5 feet 2 inches tall. There are 2.54 centimeters in 1 inch. What is Diedra's height in centimeters?

$$\frac{62 \text{ in}}{X \text{ cm}} = \frac{1 \text{ in}}{2.54 \text{ cm}}$$

$\xrightarrow{\times 62}$ $\xrightarrow{\times 62}$
 $\xrightarrow{\times 62}$ $\xrightarrow{\times 62}$

convert to inches

$$\begin{array}{l} 12 \text{ in} = 1 \text{ ft} \\ 60 \text{ in} = 5 \text{ ft} \\ 62 \text{ in} = 5 \text{ ft } 2 \text{ in} \end{array}$$

$$\begin{array}{r} 2.54 \\ \times 62 \\ \hline 508 \\ 15240 \\ \hline 157.48 \end{array}$$

157.48 cm