

Rates, Ratios, and Proportions

A) Find the unit rate

(1) \$32.75 in 5 hours

_____ in 1 hour

(2) 366 mi in 8 hours

_____ in 1 hour

(3) 14 books costs \$56

1 book costs _____

(4) 15 problems in 30 min

1 problem in _____

B) Express in simplest ratio

(1) 32 inches in length to 12 inches in width _____

(2) 4 sudoku puzzles in 2 hours _____

(3) 10 dogs to 4 cats _____

(4) 36 boys to 46 girls _____

(5) A 64 ounce container costs \$6 _____

C) Solve each proportion

$$(6) \frac{3}{9} = \frac{r}{12}$$

$$r = \underline{\hspace{2cm}}$$

$$(7) \frac{h}{30} = \frac{5}{7}$$

$$h = \underline{\hspace{2cm}}$$

$$(8) \frac{15}{a} = \frac{30}{5}$$

$$a = \underline{\hspace{2cm}}$$

$$(9) \frac{16}{12} = \frac{b}{4}$$

$$b = \underline{\hspace{2cm}}$$

$$(10) \frac{10}{2} = \frac{6}{p}$$

$$p = \underline{\hspace{2cm}}$$

$$(11) \frac{21}{12} = \frac{g}{16}$$

$$g = \underline{\hspace{2cm}}$$

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Answers

A) Find the unit rate

(1) \$32.75 in 5 hours

\$6.55 in 1 hour

(2) 366 mi in 8 hours

45.75 mi in 1 hour

(3) 14 books costs \$56

1 book costs \$4

(4) 15 problems in 30 min

1 problem in 2 min

B) Express in simplest ratio

(1) 32 inches in length to 12 inches in width 8:3

(2) 4 sudoku puzzles in 2 hours 2:1

(3) 10 dogs to 4 cats 5:2

(4) 36 boys to 46 girls 18:23

(5) A 64 ounce container costs \$6 32:3

C) Solve each proportion

$$(6) \frac{3}{9} = \frac{r}{12}$$

$$r = \underline{4}$$

$$(7) \frac{h}{30} = \frac{5}{7}$$

$$h = \underline{21.43}$$

$$(8) \frac{15}{a} = \frac{30}{5}$$

$$a = \underline{2.5}$$

$$(9) \frac{16}{12} = \frac{b}{4}$$

$$b = \underline{5.33}$$

$$(10) \frac{10}{2} = \frac{6}{p}$$

$$p = \underline{1.2}$$

$$(11) \frac{21}{12} = \frac{g}{16}$$

$$g = \underline{28}$$