

## Solving Proportions

Solve each proportion. Leave your answer as a fraction in simplest form.

1)  $\frac{6}{2} = \frac{4}{p}$

2)  $\frac{4}{k} = \frac{8}{2}$

3)  $\frac{n}{4} = \frac{8}{7}$

4)  $\frac{5}{3} = \frac{x}{4}$

5)  $\frac{m}{5} = \frac{7}{2}$

6)  $\frac{7}{4} = \frac{r}{5}$

7)  $\frac{7}{6} = \frac{5}{x}$

8)  $\frac{6}{5} = \frac{2}{5n}$

Solve each proportion. Round your answers to the nearest hundredth.

9)  $\frac{7.7}{3.6} = \frac{2.3}{b}$

10)  $\frac{v}{4.9} = \frac{5.4}{6.1}$

11)  $\frac{6.3}{x} = \frac{2.56}{9.3}$

12)  $\frac{3.4}{x} = \frac{2.17}{7.7}$

**Solve each proportion. Leave your answer as a fraction in simplest form.**

$$13) \frac{9}{8} = \frac{k+6}{6}$$

$$14) \frac{2}{10} = \frac{4}{a-3}$$

$$15) \frac{10}{p+2} = \frac{4}{3}$$

$$16) \frac{4}{6} = \frac{8}{x-1}$$

$$17) \frac{m}{8} = \frac{m+7}{9}$$

$$18) \frac{n}{n+1} = \frac{3}{5}$$

$$19) \frac{9}{4} = \frac{r-10}{r}$$

$$20) \frac{x+6}{x} = \frac{10}{7}$$

$$21) \frac{n-9}{n+5} = \frac{7}{4}$$

$$22) \frac{6}{b+9} = \frac{4}{b+5}$$

$$23) \frac{8}{3} = \frac{v-9}{7v+4}$$

$$24) \frac{8}{5x-4} = \frac{6}{x+5}$$

**Critical thinking questions:**

25) Do you think that a person's age and the amount they eat each day are basically in proportion?

26) Find one solution to:

$$\frac{x}{4} = \frac{7}{y}$$

## Solving Proportions

Date \_\_\_\_\_ Period \_\_\_\_\_

**Solve each proportion. Leave your answer as a fraction in simplest form.**

1)  $\frac{6}{2} = \frac{4}{p}$

$\left\{\frac{4}{3}\right\}$

2)  $\frac{4}{k} = \frac{8}{2}$

$\{1\}$

3)  $\frac{n}{4} = \frac{8}{7}$

$\left\{\frac{32}{7}\right\}$

4)  $\frac{5}{3} = \frac{x}{4}$

$\left\{\frac{20}{3}\right\}$

5)  $\frac{m}{5} = \frac{7}{2}$

$\left\{\frac{35}{2}\right\}$

6)  $\frac{7}{4} = \frac{r}{5}$

$\left\{\frac{35}{4}\right\}$

7)  $\frac{7}{6} = \frac{5}{x}$

$\left\{\frac{30}{7}\right\}$

8)  $\frac{6}{5} = \frac{2}{5n}$

$\left\{\frac{1}{3}\right\}$

**Solve each proportion. Round your answers to the nearest hundredth.**

9)  $\frac{7.7}{3.6} = \frac{2.3}{b}$

$\{1.07\}$

10)  $\frac{v}{4.9} = \frac{5.4}{6.1}$

$\{4.33\}$

11)  $\frac{6.3}{x} = \frac{2.56}{9.3}$

$\{22.88\}$

12)  $\frac{3.4}{x} = \frac{2.17}{7.7}$

$\{12.06\}$

Solve each proportion. Leave your answer as a fraction in simplest form.

$$13) \frac{9}{8} = \frac{k+6}{6}$$

$$\left\{ \frac{3}{4} \right\}$$

$$14) \frac{2}{10} = \frac{4}{a-3}$$

$$\{23\}$$

$$15) \frac{10}{p+2} = \frac{4}{3}$$

$$\left\{ \frac{11}{2} \right\}$$

$$16) \frac{4}{6} = \frac{8}{x-1}$$

$$\{13\}$$

$$17) \frac{m}{8} = \frac{m+7}{9}$$

$$\{56\}$$

$$18) \frac{n}{n+1} = \frac{3}{5}$$

$$\left\{ \frac{3}{2} \right\}$$

$$19) \frac{9}{4} = \frac{r-10}{r}$$

$$\{-8\}$$

$$20) \frac{x+6}{x} = \frac{10}{7}$$

$$\{14\}$$

$$21) \frac{n-9}{n+5} = \frac{7}{4}$$

$$\left\{ -\frac{71}{3} \right\}$$

$$22) \frac{6}{b+9} = \frac{4}{b+5}$$

$$\{3\}$$

$$23) \frac{8}{3} = \frac{v-9}{7v+4}$$

$$\left\{ -\frac{59}{53} \right\}$$

$$24) \frac{8}{5x-4} = \frac{6}{x+5}$$

$$\left\{ \frac{32}{11} \right\}$$

**Critical thinking questions:**

25) Do you think that a person's age and the amount they eat each day are basically in proportion?

No, a 60-year old doesn't eat six times that of a 10-year old.

26) Find one solution to:  $x = 7, y = 4$  or  $x = 14, y = 2$

$$\frac{x}{4} = \frac{7}{y}$$