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

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.