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?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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.