## 7.6 Practice - Proportions

Solve each proportion.

1) 
$$\frac{10}{a} = \frac{6}{8}$$

3) 
$$\frac{7}{6} = \frac{2}{k}$$

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

7) 
$$\frac{m-1}{5} = \frac{8}{2}$$

9) 
$$\frac{2}{9} = \frac{10}{p-4}$$

11) 
$$\frac{b-10}{7} = \frac{b}{4}$$

13) 
$$\frac{x}{5} = \frac{x+2}{9}$$

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

17) 
$$\frac{v-5}{v+6} = \frac{4}{9}$$

$$19) \ \frac{7}{x-1} = \frac{4}{x-6}$$

$$21) \ \frac{x+5}{5} = \frac{6}{x-2}$$

23) 
$$\frac{m+3}{4} = \frac{11}{m-4}$$

25) 
$$\frac{2}{p+4} = \frac{p+5}{3}$$

$$27) \ \frac{n+4}{3} = \frac{-3}{n-2}$$

$$29) \ \frac{3}{x+4} = \frac{x+2}{5}$$

2) 
$$\frac{7}{9} = \frac{n}{6}$$

4) 
$$\frac{8}{x} = \frac{4}{8}$$

6) 
$$\frac{n-10}{8} = \frac{9}{3}$$

8) 
$$\frac{8}{5} = \frac{3}{x-8}$$

10) 
$$\frac{9}{n+2} = \frac{3}{9}$$

12) 
$$\frac{9}{4} = \frac{r}{r-4}$$

14) 
$$\frac{n}{8} = \frac{n-4}{3}$$

16) 
$$\frac{x+1}{9} = \frac{x+2}{2}$$

18) 
$$\frac{n+8}{10} = \frac{n-9}{4}$$

20) 
$$\frac{k+5}{k-6} = \frac{8}{5}$$

$$22) \ \frac{4}{x-3} = \frac{x+5}{5}$$

24) 
$$\frac{x-5}{8} = \frac{4}{x-1}$$

26) 
$$\frac{5}{n+1} = \frac{n-4}{10}$$

28) 
$$\frac{1}{n+3} = \frac{n+2}{2}$$

30) 
$$\frac{x-5}{4} = \frac{-3}{x+3}$$

Answer each question. Round your answer to the nearest tenth. Round dollar amounts to the nearest cent.

- 31) The currency in Western Samoa is the Tala. The exchange rate is approximately \$0.70 to 1 Tala. At this rate, how many dollars would you get if you exchanged 13.3 Tala?
- 32) If you can buy one plantain for \$0.49 then how many can you buy with

$$6. \frac{N-10}{8} = \frac{9}{3}$$

$$3(n-10) = 72$$

$$3n-30 = 72$$

$$3n = 102$$

$$(n = 34)$$

$$8. \frac{8}{5} = \frac{3}{x-8}$$

$$8(x-8) = 15$$

$$8x-64 = 15$$

$$8x = 79$$

$$x = 9.9$$

10.  $\frac{9}{112} = \frac{3}{9}$ 

81 = 30 + 16

MAYOR (N=25)

$$12. \frac{9}{4} = \frac{Y}{V-4}$$

$$4V = 9Y-3b$$

$$-5Y = -3b$$

$$(= 1.2)$$

14. 
$$\frac{1}{9} = \frac{n-4}{3}$$
  
 $3n = 9n - 32$   
 $-5n = -32$   
 $(n = 10.4)$ 

16. 
$$\frac{x+1}{9} = \frac{x+2}{2}$$
 $2x+2 = 9x+18$ 
 $-7x = 16$ 
 $x = -2.3$ 

18. 
$$\frac{n+8}{10} = \frac{n-9}{4}$$
  
 $4n+32 = 10n-90$   
 $-6n = -122$   
 $n=20.3$ 

$$20. (K+5) = 8 = 8 = 5$$

$$(K-6) = 8 = 8$$

$$5K+25 = 8K-40$$

$$-3K = 73$$

(K=24.3)

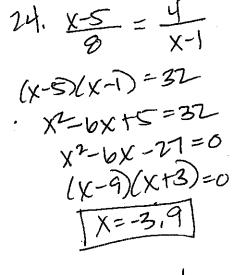
$$22.\frac{4}{1-3} = \frac{x+5}{5}$$

$$(x-3)(x+5) = 20$$

$$x^{2} + 2x - 15 = 20$$

$$(x+7)(x-5) = 0$$

$$(x+7)(x-5) = 0$$



26. 
$$\frac{5}{nH} = \frac{n-4}{10}$$
 $50 = (n+1)(n-4)$ 
 $12-3n-4=50$ 
 $12-3n-54=0$ 
 $(n-9)(n+6)=0$ 
 $12-6,9$ 

20. 
$$\frac{1}{n+3} = \frac{n+2}{2}$$
 $\frac{1}{n+3} = \frac{n+2}{2}$ 
 $\frac{1}{n^2+5n+6} = 2$ 
 $\frac{1}{n^2+5n+6} = 2$ 
 $\frac{1}{n+9(n+1)} = 0$ 
 $\frac{1}{n=-4\cdot 1}$