7.6 Practice - Proportions

Solve each proportion.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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 $7.84?

33) Kali reduced the size of a painting to a height of 1.3 in. What is the new width if it was originally 5.2 in. tall and 10 in. wide?

34) A model train has a scale of 1.2 in : 2.9 ft. If the model train is 5 in tall then how tall is the real train?

35) A bird bath that is 5.3 ft tall casts a shadow that is 25.4 ft long. Find the length of the shadow that a 8.2 ft adult elephant casts.

36) Victoria and Georgetown are 36.2 mi from each other. How far apart would the cities be on a map that has a scale of 0.9 in : 10.5 mi?

37) The Vikings led the Timberwolves by 19 points at the half. If the Vikings scored 3 points for every 2 points the Timberwolves scored, what was the half time score?

38) Sarah worked 10 more hours than Josh. If Sarah worked 7 hr for every 2 hr Josh worked, how long did they each work?

39) Computer Services Inc. charges $8 more for a repair than Low Cost Computer Repair. If the ratio of the costs is 3 : 6, what will it cost for the repair at Low Cost Computer Repair?

40) Kelsey's commute is 15 minutes longer than Christina's. If Christina drives 12 minutes for every 17 minutes Kelsey drives, how long is each commute?

7.6

Answers - Proportions

1) $\frac{40}{3} = a$

2) $n = \frac{14}{3}$

3) $k = \frac{12}{7}$

4) $x = 16$

5) $x = \frac{3}{2}$

6) $n = 34$

7) $m = 21$

8) $x = \frac{79}{8}$

9) $p = 49$

10) $n = 25$

11) $b = -\frac{40}{3}$

12) $r = \frac{36}{5}$

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

14) $n = \frac{32}{5}$

15) $a = \frac{6}{7}$

16) $v = -\frac{16}{7}$

17) $v = \frac{69}{5}$

18) $n = \frac{61}{3}$

19) $x = \frac{38}{3}$

20) $k = \frac{73}{3}$

21) $x = -8, 5$

22) $x = -7, 5$

23) $m = -7, 8$

24) $x = -3, 9$

25) $p = -7, -2$

26) $n = -6, 9$

27) $n = -1$

28) $n = -4, -1$

29) $x = -7, 1$

30) $x = -1, 3$

31) \$9.31

32) 16

33) 2.5 in

34) 12.1 ft

35) 39.4 ft

36) 3.1 in

37) T: 38, V: 57

38) J: 4 hr, S: 14 hr

39) \$8

40) C: 36 min,
K: 51 min