

HW: pg. 152-154/2, 4-16

Warm up:

(% as a decimal)(of) = (is)

1) Of the 60 books on a shelf, 24 are nonfiction. What percent of the books are nonfiction?

$$\frac{p \cdot 60}{60} = \frac{24}{60}$$

$$p = 0.4$$

40%

$$\frac{p}{100} = \frac{24}{60}$$

2) 43.75% of Paul's DVDs are action films. If Paul has 28 action films, how many DVDs does he own?

$$\frac{0.4375x}{0.4375} = \frac{28}{0.4375}$$

$$x = 64$$

64 DVDs

3) In a recent year, 17.7% of households watched the final episode of a popular reality TV show. There are 110.2 million television households in the United States. How many households watched the final episode?

$$0.177(110.2)$$

19.5054 million households

A pair of shoes is on sale for \$51. This is 75% of the original price. What is the original price?

$$\begin{array}{r} 0.75x = 51 \\ \hline 0.75 \quad 0.75 \\ \hline x = 68 \end{array}$$
$$\frac{75}{100} = \frac{51}{x}$$

\$68

Lisa and Michelle scored 48% of their team's points. If their team had a total of 50 points, how many points did they score?

$$0.48(50) = 24$$

24 points



~~00% of what number is 100?~~

22 is what percent of 68?

$$\frac{p \cdot 68}{68} = \frac{22}{68}$$

(% as a decimal) (of) = (is)

$$0.3235 \cdot 68 = 22$$

$$p = 32.35\%$$

You want to leave a 20% tip for your waiter. If your bill is \$67.90, how much tip should you leave?

$$\begin{array}{r} \cancel{20} = \cancel{x} \\ \cancel{100} \quad \cancel{67.90} \\ \cancel{20 \cdot 67.90 = 100x} \\ \cancel{1358 = 100x} \\ \cancel{100} \quad \cancel{100} \\ x = \cancel{13.58} \end{array}$$

$$0.2(67.90)$$
$$\$13.58$$

Sales tax in New Jersey is 7%. If you buy a TV for \$1350, what is the sales tax that you must pay?

$$\frac{7}{100} = \frac{x}{1350}$$
$$\frac{100x}{100} = \frac{9450}{100}$$
$$x = 94.50$$

$$0.07(1350)$$
$$\$94.50$$



60% of the members in the chess club are also in the computer club. If there are 35 people in the chess club, how many of them are also in the computer club?

$$0.6(35) = 21$$

21 people