

Warm up:

Solve.

$$1) \frac{0.05x}{0.05} = \frac{12}{0.05}$$
$$x = 240$$

$$2) \frac{0.0009x}{0.0009} = \frac{50}{0.0009}$$
$$x = 55555.\overline{5555}$$
$$\approx 55555.56$$

$\frac{3}{4}$ of 56

$$\frac{3}{4} \times 56$$

What is 16% of 82?

$$\frac{16}{100} = \frac{x}{82}$$

$$\frac{100x}{100} = \frac{1312}{100}$$

$$x = 13.12$$

$$\frac{16}{100} \times 82$$

$$0.16 \times 82$$

$$13.12$$

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

43% of 72

$$0.43(72) = 30.96$$

What is 140% of 85?

$$1.4(85) = 119$$

79 is what percent of 250?

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

$$p(250) = 79$$

$$\frac{250p}{250} = \frac{79}{250}$$

$$p = 0.316$$

$$31.6\%$$

82 is 90% of what number?

$$\left(\begin{array}{l} \% \text{ as a} \\ \text{decimal} \end{array}\right) (\text{of}) = (\text{is})$$

$$\frac{0.9x}{0.9} = \frac{82}{0.9}$$

$$x = 91.111\bar{1}$$

$$\approx 91.11$$

In a recent survey, 216 people, or 54% of the sample, said they usually went to a family restaurant when they went out to eat. How many people were surveyed?

$$\begin{array}{r} 0.54x = 216 \\ \hline 0.54 \quad 0.54 \\ \hline x = 400 \end{array}$$

400 people

Mark agreed to pay a realtor 6.5% commission for selling his house. If the house sold for \$68,900, how much does Mark have after paying the realtor's commission?

$$0.065(68900) = 4478.5$$

$$68900 - 4478.5 = 64421.5$$

\$64,421.50

- 1) 45 is what percent of 18?
- 2) 8.6 is 5% of what number?
- 3) Linda earns \$40 base pay per week, plus 10% commission on all sales. What were her sales if she made \$112 in one week?
- 4) Juliet sold a house for \$112,000. What percent commission did she receive if she earned \$6,720?
- 5) John makes 2% royalties on a book he wrote. How much money did his book earn in sales last year if he made \$53,000 in royalties?

1) 45 is what percent of 18?

$$\frac{18p}{18} = \frac{45}{18}$$
$$p = 2.5$$

250%

2) 8.6 is 5% of what number?

$$\begin{array}{r} 0.05x = 8.6 \\ \hline 0.05 \quad 0.05 \\ \hline x = 172 \end{array}$$

3) Linda earns \$40 base pay per week, plus 10% commission on all sales. What were her sales if she made \$112 in one week?

$$\begin{array}{r} 112 \\ - 40 \\ \hline 72 \end{array}$$

$$\begin{array}{r} 0.10x = 72 \\ \hline 0.10 \quad 0.10 \\ \hline x = 720 \\ \$ 720 \end{array}$$

4) Juliet sold a house for \$112,000. What percent commission did she receive if she earned \$6,720?

$$\frac{6720}{112000} = \frac{p}{100}$$
$$p = 0.06$$

6%

5) John makes 2% royalties on a book he wrote. How much money did his book earn in sales last year if he made \$53,000 in royalties?

$$\begin{array}{r} 0.02x = 53000 \\ \hline 0.02 \quad 0.02 \\ \hline x = 2,650,000 \\ \hline \text{\$ } 2,650,000 \end{array}$$

