

15.4

The Percent Equation

Today's Learning Goals:

- Use the percent equation to find parts, wholes, and percents.
- Solve real-life problems.

Solving percent problems using proportions.

$$\underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

$$\underline{\hspace{1cm}} = \underline{\hspace{1cm}}$$

$$\underline{\hspace{1cm}} = \underline{\hspace{1cm}}$$

Review

Solving the following using a proportion.

- 1) What percent of 40 is 4?

Review

Solving the following using a proportion.

2) What number is 22% of 300

Review

Solving the following using a proportion.

3) 84 is 70% of what number?

THE PERCENT EQUATION

(Decimal Method)

$$\text{part} = \% \bullet \text{whole}$$

Change percent into a decimal first!!!!!!

$$a = p \bullet w$$

Practice

$$\text{part} = \% \bullet \text{whole}$$

$$a = p \bullet w$$

1) What number is 20% of 110?

Practice

$$\text{part} = \% \bullet \text{whole}$$

$$a = p \bullet w$$

2) The number 90 is 45% of what number?

Practice

$$\text{part} = \% \bullet \text{whole}$$

$$a = p \bullet w$$

3) 90 is what percent of 150?

Practice

$$\text{part} = \% \bullet \text{whole}$$

$$a = p \bullet w$$

4) A shoe salesperson sells a pair of shoes for \$60.
The salesperson receives a 9% commission on the sale. How much is the commission?

On Your Own

$$\text{part} = \% \bullet \text{whole}$$

$$a = p \bullet w$$

5) 130 is 65% of what number?

On Your Own

$$\text{part} = \% \cdot \text{whole}$$

$$a = p \cdot w$$

6) 50 is what percent of 250?

Practice

$$\text{part} = \% \cdot \text{whole}$$

$$a = p \cdot w$$

7) A clothing salesperson sells a suit for \$350.
The salesperson receives an 8% commission on the sale. How much is the commission?

Application

$$\text{part} = \% \cdot \text{whole}$$

$$a = p \cdot w$$

8th Street Cafe

DATE: MAY04'13 05:45PM
TABLE: 29
SERVER: JANE

Food Total	27.50
Tax	1.65
Subtotal	29.15

TIP: _____

TOTAL: _____

Thank You

a. Find the percent of sales tax on the food total.

At the end, convert the decimal back into a percent!

Application

$$\text{part} = \% \cdot \text{whole}$$

$$a = p \cdot w$$

8th Street Cafe

DATE: MAY04'13 05:45PM
TABLE: 29
SERVER: JANE

Food Total	27.50
Tax	1.65
Subtotal	29.15

TIP: _____

TOTAL: _____

Thank You

b. Find the amount of a 16% tip on the food total.