15.4

The Percent Equation

Solving percent problems using proportions.

$$\frac{\underline{\hspace{3cm}}}{\underline{\hspace{3cm}}} = \frac{\underline{\hspace{2cm}}}{100}$$

$$\frac{\underline{\hspace{1.5cm}}}{\underline{\hspace{1.5cm}}} = \frac{\underline{\hspace{2cm}}}{100}$$

Review

Solving the following using a proportion.

1)   **What percent of 40 is 4?**

Review

Solving the following using a proportion.

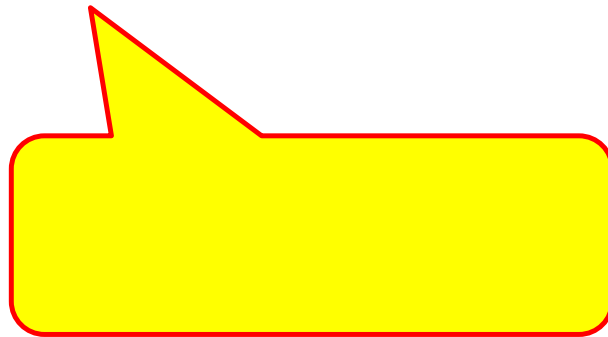2)   **What number is 22% of 300**

Review

Solving the following using a proportion.

3) 84 is 70% of what number?

THE PERCENT EQUATION

(Decimal Method)

$$part = \% \cdot whole$$

$$a = p \cdot w$$

Practice

1) What number is 20% of 110?

Practice

$$\boxed{\text{part} = \% \bullet \text{whole}}$$
$$a = p \bullet w$$

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

Practice

3) 90 is what percent of 150?

Practice

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

part = % ● whole

a = p ● w

5) 130 is 65% of what number?

On Your Own

part = % • whole

a = p • w

6) 50 is what percent of 250?

Practice

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

Application

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.

Application

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.