15.3

Solving Percent Problems Using the Percent Proportion

Today's Learning Goals:

- Find percents of numbers.

- Find the whole given the part and the percent.

- Use the percent proportion to find parts, wholes, and percents.

Solving Percent Problems Using Fractions

Rules 1)_____

2)_____

1) 50% of 35

2) 20% of 60

Solving Percent Problems Using Fractions

3) 25% of 40

4) 60% of 120

5) 75% of 32

Rules 1)_____

2)_____

6) **50% of what number is 75.**

7) **75% of what number is 48**

8) **5% of what number is 10.**

The Percent Proportion

In percent problems you are looking for…

the **PART** of something

the **WHOLE** of something

the **PERCENT** of something

Look at the following, can you identify the following?

PART WHOLE PERCENT

1) **50% of 20 is 10.**

2) **6 is 25% of 24.**

3) **10% of 50 is 5.**

4) **30 is 75% of 40.**

In percent problems, in order to solve them, you have to be able to identify what you are trying to find and what is given to you.

In the following problems, what are you trying to find out? What is given to you?

PART   **WHOLE**   **PERCENT**

4) **What is 50% of 20?**

PART   **WHOLE**   **PERCENT**

5) **What percent of 10 is 5?**

6) **8 is 50% of what number?**

PART   **WHOLE**   **PERCENT**

7) **What is 50% of 60?**

8) **20 is 50% of what number?**

Solving percent problems using proportions.

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

In percent problems, in order to solve them, you have to be able to identify what you are trying to find and what is given to you.

In the following problems, set the problems up in a proportion using the following info:

PART   **WHOLE**   **PERCENT**

4)   **What is 50% of 20?**

PART   **WHOLE**   **PERCENT**

5)   **What percent of 10 is 5?**

6)   **8 is 50% of what number?**

PART   **WHOLE**   **PERCENT**

7)   **What is 50% of 60?**

8)   **20 is 50% of what number?**

Solve the following using proportions:

9) **What is 76% of 25?**

10) **42 is 30% of what number?**

Solve the following using proportions:

11) What percent of 5 is 2?

12) What is 37% of 200?