Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Class: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Notes

**Learning Target 7: I can find the percent given the part and a whole.**

Objective: I can find a missing percent given the part and the whole using a proportion.

**Using the PROPORTION METHOD, the set-up is always the same:**

|  |  |  |
| --- | --- | --- |
| PERCENT | -- | the number with the percent sign (**%**). |
| PART | -- | the number with the word ***is***. |
| WHOLE | -- | the number with the word ***of***. |

|  |
| --- |
| **Example: 3 is what percent of 4?**  |
|  | 3 appears with the word ***is***:     It's the PART and goes on top. 4 appears with the word ***of***:     It's the WHOLE and goes on the bottom. | A proportion showing one fraction  with 3 as the numerator and 4 as the denominator equal to another fraction with percent as the numerator and 100 as the denominator. |
| **We're trying to find the missing PERCENT (out of the *whole*100%).**  |
|  | In a proportion the cross-products are equal:   So 3 times 100 is equal to 4 times the PERCENT.  |
| **The missing PERCENT equals 100 times 3 divided by 4.**  |
|  | (Multiply the two opposite corners with numbers; then divide by the other number.) |
|  |

|  |  |  |  |
| --- | --- | --- | --- |
|  | 3 times 100 | = | 4 times *the percent* |
| 300 | = | 4 times *the percent* |
| 300/4 | = | 4/4 times *the percent*  |
| 75 | = |   *the percent*  |

 | A proportion showing the numerator,  3, times the diagonally opposite 100; divided by  4. |

Guided Practice:

1) 6 is what percent of 8? 2) 25 is what percent of 30?

3) 15 is what percent of 40? 4) What percent of 60 is 75?

Classwork

1. What percent of 42 is 14?

2. Jennie has $300 and she spends $15. What percent of her money is spent?

3. If 8 out of 20 students in a class are boys, what percent of the class is made up of boys?

4. 12 out of 30 students studied Spanish. What percent studied Spanish?

5.14 out of 56 students got an A. What percent got an A?

6. 16 is what percent of 200?