

November 2, 2011

No Warm-Up! :)

**Not correcting today either
pink worksheet due tomorrow**

*Short day because of the assembly
(btw, be sure it's in your planner!)*

11/2 - Solving Percent Equations using Proportions

"Percent" means...

out of 100

If you got 22 out of 25 on a quiz, what % is that?

$$\begin{array}{ccccc} \text{part} & \frac{22}{25} & = & \frac{\boxed{88}}{100} & \text{part} \\ \text{whole} & & & & \text{whole} \end{array}$$

Identify the part and the whole in each:

45 is ~~what~~ percent of 50?
part whole

$\frac{\text{part}}{\text{whole}}$ $\frac{\text{"is"}}{\text{"of"}}$

75 is ~~38%~~ of what number?
part whole

What is ~~85%~~ of 46?
part whole

Solve each by setting up proportions and solving.

What number is 75% of 60?

$$\frac{75}{100} \times \frac{n}{60}$$
$$\frac{100n}{100} = \frac{4500}{100}$$
$$n = 45$$

40 out of 56 is what percent?

$$\frac{n}{100} \times \frac{40}{56}$$
$$\frac{56n}{56} = \frac{4000}{56}$$
$$n = 71.4\%$$

120 is 25% of what number?

$$\frac{25}{100} = \frac{120}{x}$$
$$\frac{25x}{25} = \frac{12000}{25}$$
$$x = 480$$

45 is what percent of 180?

$$\frac{n}{100} \times \frac{45}{180}$$
$$\frac{180n}{180} = \frac{4500}{180}$$
$$n = 25\%$$

Solve each by setting up proportions and solving.

97 is 62% of what number?

$$\frac{62}{100} = \frac{97}{n}$$

$$\boxed{\frac{\%}{100} = \frac{\text{is}}{\text{of}}}$$

84 is what percent of 86?

$$\frac{n}{100} = \frac{84}{86}$$

$$\frac{86n}{86} = \frac{8400}{86}$$

$$n = 97.7$$

27 out of 56 is what percent?

$$\frac{P}{100} = \frac{27}{56}$$

What number is 4% of 110?

$$\frac{4}{100} = \frac{n}{110}$$

Homework:

Lawender Worksheet

#1-20 all

use a calculator

Due Thursday