March 6, 2015 4th

Starter

Find the missing numbers.

1. What is 40% of 84?

$\frac{x}{84} = \frac{40}{100}$

$\frac{3360}{100} = \frac{100x}{100}$

$x = 33.60$

2. What number is 35% of 60?

$\frac{x}{60} = \frac{35}{100}$

$\frac{2100}{100} = \frac{100x}{100}$

$x = 21$

3. 50 is 80% of what number?

$\frac{50}{x} = \frac{80}{100}$

$80x = 5000$

$\frac{80x}{80} = \frac{5000}{80}$

$x = 62.5$

3/6 Percent Increase/Decrease

"Percent Increase" means how much a number has increased **compared to the original** number.

If you made $40 mowing lawns one week and $48 the following week, what is the **percent increase**?

$\frac{8}{40}$ is what %?

$\frac{8}{40} = \frac{p}{100}$

$\frac{40p}{40} = \frac{800}{40}$

$p = 20\%$

If you made $50 one week for shoveling driveways and only $30 the next week since it hardly snowed, what was the **percent decrease**?

$$\begin{array}{r} 50 \\ -30 \\ \hline 20 \end{array} \rightarrow \frac{20}{50} = \frac{p}{100}$$

$$\frac{50p}{50} = \frac{2000}{50}$$

$$p = 40\%$$

Find the percent change and determine if is an increase or decrease.

From 42 to 82

$\frac{40}{42} = \frac{P}{100}$

$\frac{42p}{42} = \frac{4000}{42}$

$p = 95.2\%$ inc

$82 - 42 = 40$

4000 ÷ 42 = 95.238095

From 90 to 82

$\frac{8}{90} = \frac{P}{100}$

$\frac{90p}{90} = \frac{800}{90}$

$p = 8.9\%$ dec

$90 - 82 = 8$

800 ÷ 90 = 8.888889

From 65 to 64

$\frac{1}{65} = \frac{P}{100}$

$\frac{65p}{65} = \frac{100}{65}$

$p = 1.5\%$ dec.

100 ÷ 65 = 1.538462

Find the percent change and determine if is an increase or decrease.

From 25 tons to 66 tons

$66 - 25 = 41$

$$\frac{41}{25} = \frac{p}{100}$$

$$\frac{25p}{25} = \frac{4100}{25}$$

$p = 164\%$ inc

Homework

Green WS3

Due Tuesday