

1/29/20 Be able to solve percent of change problems.

Equation

$$\text{Percent of Change} = \frac{\text{Change}}{\text{original}}$$

decimal form

multiply by 100

Proportion

$$\frac{\text{Change}}{\text{original}} = \frac{\text{percent of change}}{100}$$

don't have to multiply by 100

Class Size (What is the percent of change?)

Change 32 to 41

$$\frac{9}{32} = \frac{x}{100} \quad \boxed{\text{or}} \quad x = \frac{9}{32}$$

$$x = 28.125\%$$

Increase

↑

33 to 27

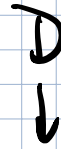
$$x = \frac{6}{33} \quad \boxed{\text{or}}$$

$$x = .181818 \\ 18.\overline{18}\%$$

$$\frac{6}{33} = \frac{x}{100}$$

$$x = 18.18\%$$

Decrease



7 to 63

$$x = \frac{56}{7}$$

$$x = 8 \\ 800\%$$

% of change

$$\frac{56}{7} = \frac{x}{100}$$

$$x = 800\% \text{ increase}$$

Can increase more than 100%.

Can I decrease more than 100%?

