6-3B: Percent of Change 11-17-15

Percent of Change: ratio that compares the change in quantity to the original amount.

difference in amounts: higher # - lower #

$\frac{\text{change in amount}}{\text{original amount}} = \frac{\%}{100}$

original amount → first #

Percent of Increase: going from lower # to higher # (↑)

Percent of Decrease: going from higher # to lower # (↓)

Ex. 1: Find percent of change, determine if it is an increase or decrease. Round to nearest whole percent.

A) 10 yards to 13 yards

$\frac{\text{change}}{\text{original}} = \frac{\%}{100}$

$\frac{13-10}{10} = \frac{p}{100}$

$\frac{3}{10} = \frac{p}{100}$

$100 \cdot 3 = 10p$

$\frac{300}{10} = \frac{10p}{10}$

$30 = p$

$p = 30\%$ ↑

B) \$20 to \$15

$\frac{20-15}{20} = \frac{p}{100}$

$\frac{5}{20} = \frac{p}{100}$

$100 \cdot 5 = 20p$

$\frac{500}{20} = \frac{20p}{20}$

$25 = p$

$p = 25\%$ ↓

C) Jonas is saving for a video game that costs \$36. Last year the the game cost \$28. What is the percent of change?

\$28 to \$36

$\frac{36-28}{28} = \frac{p}{100}$

$\frac{8}{28} = \frac{p}{100}$

$100 \cdot 8 = 28p$

$\frac{800}{28} = \frac{28p}{28}$

$28.571428 = p$

$p = 29\%$ ↑

HW: GM7 pg. 348 (6-20 all)