Algebra I

3-7

(Day 2)

Solve Percent Problems

Percent of Change -

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

$$\frac{\text{original} - \text{new}}{\text{original}} \times 100\%$$

Find the following:

1) A pair of denim jeans was $25.00 per pair, but was increased in price to $30.00 a pair. What was the price increase, and what was the percent of increase?

change: $30-25=\$5$

$$\frac{5}{25} \times 100\% = .2(100\%) = \boxed{20\%}$$

Find the following:

2) A Burton snowboard was originally priced $240.00, but this week is on sale for $160.00. What is the percent of decrease in price?

change: $80 = 240 − 160

$\frac{80}{240} = .\overline{3}$

$33\frac{1}{3}\%$

$.\overline{3} = \frac{1}{3}$

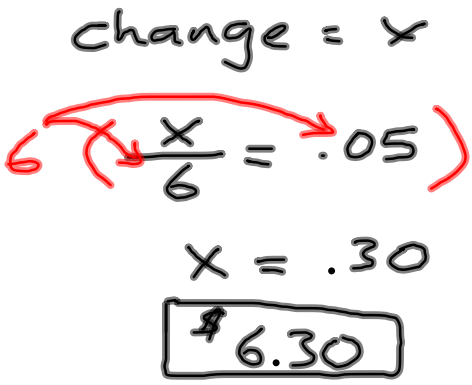
$.\overline{6} = \frac{2}{3}$

$.1\overline{6} = \frac{1}{6}$

$.8\overline{3} = \frac{5}{6}$

Find the following:

3) All bargain DVDs are to be marked up 5%. If they are currently priced $6.00 each, what will the new price be?



Find the following:

4) A crosscut hand saw was recently marked up 10% to $22.00. What was the original price?

$20

Change : $22 - x$

original : x

$$x\left(\frac{22-x}{x} = .10\right)$$

$$22 - x = .10x$$

$$22 - x + x = .10x + x$$

$$\frac{22}{1.1} = \frac{1.10x}{1.1}$$

$$20 = x$$

Assignment:

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4-18 even,
19-21, 24, 25,
36, 37, 39

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2-14 even