

Warm up:

1) You bought Apple stock when it was \$143 per share. Since then, the price has gone up by 12%. What is the current price?

$$1.12(143) = \$160.16$$

2) This year, there were 42 students on the cross country team. Last year, there were 37 students. What was the percent change?

$$\frac{42-37}{37} = \frac{5}{37} = 13.51\%$$

HW Solutions

$$\textcircled{8} \quad \frac{22-16}{16} = \frac{6}{16} = 0.375$$

$\textcircled{37.5\%}$

①

$$\frac{1.45x = 18}{1.45 \quad 1.45}$$

$$x = 12.4137931$$

\$12.41

Q 210% ↑
310%

$$\frac{3.1x}{3.1} = \frac{22}{3.1}$$

$$x = 7.096774194$$

\$7.10

⑨

$$\frac{1.24x}{1.24} = \frac{650}{1.24}$$

$$x = 524.1935484$$

\$524.19

②

4.3 (4.50)

\$19.35

⑪

$$\frac{0.4x}{0.4} = \frac{32}{0.4}$$

$$x = 80$$

\$80

③

$$\frac{2.2x = 300}{2.2 \quad 2.2}$$

$$x = 136.3636\overline{36}$$

$$\$136.36$$

④

$$\frac{0.8x}{0.8} = \frac{6}{0.8}$$

$$x = 7.5$$

\$ 7.50

$$\textcircled{3} \quad \frac{685 - 642}{642} = \frac{43}{642} = 0.066978193$$

$\textcircled{6.70\%}$

$$\textcircled{4} \quad 0.86(740)$$

$\textcircled{\$636.40}$

$$\textcircled{2} \quad 0.7(19) = 13.3$$

$\$13.30$

To find percent change...

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

For problems where you know the percent change...

- always starting with 100%
- always finding a percentage of the ORIGINAL number

Emma bought a dress that was on sale for \$45 as part of a 35% off sale. What was the regular price?

$$\begin{array}{r} 0.65x = 45 \\ \hline 0.65 \quad 0.65 \\ \hline X = 69.23076923 \\ \hline \text{\$ } 69.23 \end{array}$$

Every item in Greg's Ski Shop is marked up 65%. If Greg purchased a set of skis for \$130, what would he sell them for?

$$1.65(130)$$

$$214.5$$

$$\text{\$ } 214.50$$

Worksheet

