

$$\frac{\text{original} - \text{new}}{\text{original}} = \text{decimal}$$

then multiply by 100  
to get percent

Pg. 148 (7-19 odd, 25-30 odd)

⑦ Original 12 ↑ \* increase → new price is higher  
New 18

$$\frac{|12 - 18|}{12} = \frac{|-6|}{12} = \frac{6}{12} = .5 \times 100 = 50\%$$

⑨ Original 15 ↓ \* decrease → new price is lower  
new 14

$$\frac{|15 - 14|}{15} = \frac{1}{15} = .067 \times 100 = 6.7\% \rightarrow \text{round to } 7\%$$

⑪ Original 40.2  
new 38.6 ↓ decrease  
 $\frac{|40.2 - 38.6|}{40.2} = \frac{1.6}{40.2} = .039 \times 100 = 3.9\% \rightarrow \text{round to } 4\%$

⑬ Original 14,500  
new 22,320 ↑ increase

$$\frac{|14,500 - 22,320|}{14,500} = \frac{|-7,820|}{14,500} = \frac{7,820}{14,500} = .539 \times 100 = 53.9\% \rightarrow \text{round to } 54\%$$

⑮ Original 1325.60  
new 1685.60 ↑ increase

$$\frac{|1325.60 - 1685.60|}{1325.60} = \frac{|-360|}{1325.60} = \frac{360}{1325.60} = .27 \times 100 = 27\%$$

(17) June : 18.75 (original)  
November : 8.5 (new)

$$\frac{|18.75 - 8.5|}{18.75} = \frac{10.25}{18.75} \approx .55 \times 100 = 55\%$$

(19)  $\frac{|\text{Estimated} - \text{Actual}|}{\text{Actual}} \times 100$

$$\frac{|45 - 52|}{52} = \frac{|-7|}{52} \approx .13 \times 100 = 13\%$$

(25) Original 2 ft  
new 5.5 ft ↑

$$\frac{|\text{original} - \text{new}|}{\text{original}} = \frac{|2 - 5.5|}{2} = \frac{|-3.5|}{2} = \frac{3.5}{2} = 1.75 \times 100 = 175\% \text{ increase.}$$

(27) Original 140.25  
new 80.75 ↓

$$\frac{|140.25 - 80.75|}{140.25} = \frac{|59.5|}{140.25} = \frac{59.5}{140.25} \approx .42 \times 100 = 42\% \text{ decrease}$$

(29) Original \$168.45  
new \$234.56 ↑

$$\frac{|168.45 - 234.56|}{168.45} = \frac{|-66.11|}{168.45} = \frac{66.11}{168.45} \approx .39 \times 100 = 39\% \text{ increase}$$