

5.7 Percent of change

Original:

New :

$$\text{Percent of change} = \left(\frac{\text{Larger} - \text{Smaller}}{\text{original}} \right) \cdot 100$$

original: 20

New: 23

$$\left(\frac{23 - 20}{20} \right) \cdot 100$$

$$\left(\frac{3}{20} \right) \cdot \frac{100}{1}$$

$$\frac{15}{1} = 15\% \text{, Increase}$$

original: 300

New: 200

$$\left(\frac{300 - 200}{300} \right) \cdot \frac{100}{1}$$

$$\left(\frac{100}{300} \right) \left(\frac{100}{1} \right)$$

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

Buy Roller Blades for \$85, ^{original} price
 The price with tax is \$92.50
 Find the tax rate?

$$\left(\frac{92.50 - 85.00}{85} \right) \cdot \frac{100}{1}$$

$$\left(\frac{7.50}{85} \right) \left(\frac{100}{1} \right)$$

Round to
 nearest
 Tenth

$$(.08823)(100)$$

$$8.823\%$$

$$= 8.8\%$$

Find selling price given
the markup?

CD is \$15. The markup
is 10%. Find
selling price?

$$\begin{aligned} & (10\%) (\$15) \\ & \cdot 1 (\$15) = \$1.50 \\ \$15 + \$1.50 & = \textcircled{\$16.50} \end{aligned}$$

P. 239-240
~~#~~ 4-30 even