**Percent Change**
**BUSI 101B**

## Percent Change from starting to ending point

| | | |
|---|---|---|
| % Change = % Δ | Solve for % Δ | $\% \Delta = \frac{P_2 - P_1}{P_1}(100)$ |
| Price (new) = $P_{NEW}$ = $P_2$ = $P_{END}$ | Solve for $P_2$ | $P_2 = P_1 \; x \; \left(\frac{\% \Delta}{100} + 1\right)$ |
| Price (old) = $P_{OLD}$ = $P_1$ = $P_{BEG}$ | Solve for $P_1$ | $P_1 = \frac{P_2}{1 + \frac{\% \Delta}{100}}$ |

## Percent Change from ending to starting point

| | | |
|---|---|---|
| % Change = % Δ | Solve for % Δ | $\% \Delta = \frac{P_2 - P_1}{P_2}(100)$ |
| Price (new) = $P_{NEW}$ = $P_2$ = $P_{END}$ | Solve for $P_2$ | $P_2 = P_1 \; x \; (1 + \; \Delta)$ |
| Price (old) = $P_{OLD}$ = $P_1$ = $P_{BEG}$ | Solve for $P_1$ | $P_1 = \; P_2 \; (1 - \Delta)$ |

When calculating % Δ you should **ALWAYS** extend your calculation to the 4th decimal place. If you're finding the solution for a quiz or exam you should then also pay close attention to how the solution is to be presented and only use as many places to the right of the decimal as instructed in the problem or question.