

Calculating Percent Change

1 If you have \$100 and then get \$40 more, what is the percent change?

$$\begin{aligned} & \textcircled{+40\%} \\ & \text{(or a 40\% increase)} \end{aligned}$$

2 If you have \$100 and then lose \$25, what is the percent change?

$$\begin{aligned} & \textcircled{-25\%} \\ & \text{(or a 25\% decrease)} \end{aligned}$$

3 If you have \$80 and then get \$20 more, what is the percent change?

$$\begin{aligned} \% \text{ change} &= \frac{20}{80} \times 100 \\ &= 0.25 \times 100 \\ &= \textcircled{+25\%} \end{aligned}$$

4 If you have \$75 and then lose \$25, what is the percent change?

$$\begin{aligned} \% \text{ change} &= \frac{-25}{75} \times 100 \\ &= -0.333 \times 100 \\ &= \textcircled{-33.3\%} \end{aligned}$$

5 On Sunday, the high temperature was 71° F, but on Monday it was 5° F lower. What was the percent change?

$$\begin{aligned} \% \text{ change} &= \frac{-5}{71} \times 100 \\ &= -0.070 \times 100 \\ &= \textcircled{-7\%} \end{aligned}$$



6 A deli sold 230 sandwiches one day, but the next day they sold an additional 35 sandwiches. What was the percent change from the previous day?

$$\begin{aligned} \% \text{ change} &= \frac{35}{230} \times 100 \\ &= 0.152 \times 100 \\ &= \textcircled{+15.2\%} \end{aligned}$$



7 A mechanic repaired 12 cars one day, but the next day they repaired 7 cars. What was the percent change?

$$\begin{aligned} \text{change} &= 7 - 12 = -5 \\ \% \text{ change} &= \frac{-5}{12} \times 100 \\ &= -0.417 \times 100 \\ &= \textcircled{-41.7\%} \end{aligned}$$



8 A bakery sold a total of 42 pies one day, but the next day they sold a total of 50 pies. What was the percent change in daily pie sales?

$$\begin{aligned} \text{change} &= 50 - 42 = 8 \\ \% \text{ change} &= \frac{8}{42} \times 100 \\ &= 0.190 \times 100 \\ &= \textcircled{+19\%} \end{aligned}$$

