

Percent of Change

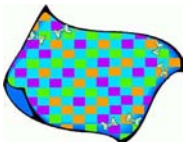


Percent of change has to do with situations where a **price or some amount increases or decreases** (= changes) by some percentage. First, we will review discounts and price increases. Then, we will study how to find the percent of change—how to find by how many percent the price or other amount changed.

You have already studied discounts, where the price of an item is discounted by 10%, 15%, or some other percentage. Similarly, the price of an item can also *increase* by a certain percentage.







Example. An airplane ticket costs \$120 now. Next week it will increase by 10%. What is the new price?

First, calculate 10% of \$120. That is \$12. Then *add* that to the current price: $\$120 + \$12 = \$132$. The new price is \$132.

1. Let's review. All items are on sale. Calculate the new, discounted price.

| | | |
|---|---|--|
|  <p>a. Price: \$9 20% off</p> <p>New price: \$ _____</p> |  <p>b. Price: \$6 25% off</p> <p>New price: \$ _____</p> |  <p>c. Price: \$90 30% off</p> <p>New price: \$ _____</p> |
|---|---|--|

2. The price of these items goes up. Find the new price.

| | | |
|---|---|--|
|  <p>a. Price: \$5,000 10% increase</p> <p>New price: \$ _____</p> |  <p>b. Price: \$110 20% increase</p> <p>New price: \$ _____</p> |  <p>c. Price: \$90 30% increase</p> <p>New price: \$ _____</p> |
|  <p>d. Price: \$3 15% increase</p> <p>New price: \$ _____</p> |  <p>e. Price: \$2 30% increase</p> <p>New price: \$ _____</p> |  <p>f. Price: \$1.50 50% increase</p> <p>New price: \$ _____</p> |

3. A jacket costs \$50. First, its price increases by 20%. Then, it is discounted by 20%. Calculate the final price. Notice: it will NOT be \$50!