

Percent of Change

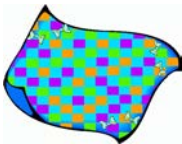


Percent of change has to do with situations where a price or some other quantity *increases* or *decreases* (changes) by a percentage. First we'll review discounts and price increases. Then we'll study how to calculate the percent of change — that is, how to find how many percent the price or other quantity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

You've 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 airline ticket costs \$120 now. Next week it goes up by 10%. What will the new price be?

First, calculate 10% of \$120. That's \$12. Since the price is going *up*, we *add* that to the current price: $\$120 + \$12 = \$132$. So the new price is \$132.

1. Let's review. All these 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!