

Percent of Change

Formula for Percent of Change:

Change (subtract the original and new value)	% of change
Original Value	100

Example:

1. If Jose used to be able to run a mile in 6 minutes, and now he can run a mile in 5 minutes, by what percent did his run time change?

Use the formula above

$6-5=$ 1	
6	100

Cross multiply

$$100 \times 1 = \mathbf{100}$$

Divide

$$\mathbf{100} \div \mathbf{6} = \mathbf{\underline{16.67\%}}$$

His run time changed by **16.67%**.

1. A TV used to cost \$600. It is on sale this week for \$400. By what percent did the price change?

Change			% of change
Original Value		100	

2. Michelle used to be able to type 48 words per minute. After taking a typing class she can now type 60 words per minute. By what percent did her typing speed change?

Change			% of change
Original Value		100	

3. A school had 650 boys last year. This year they have 780 boys. By what percent did their boy population change?

Change			% of change
Original Value		100	

4. Gas cost \$3.00 per gallon two months ago. It has decreased 20% since then, what is the gas price now?

Change			% of change
Original Value		100	

What is the gas price now?

5. At the beginning of track season Amelia could run a mile in 6 minutes. By the end of the season she had **REDUCED** her time by 25%. How long did it take Amelia to run a mile at the end of the season?

Change			% of change
Original Value		100	

How long did it take Amelia to run a mile at the end of the season?

6. Jeremy's boss increased his salary from \$8 per hour to \$12 per hour. By what percent did his hourly wages increase?

Change			% of change
Original Value		100	

7. The price of gasoline was \$3.60 per gallon on Friday. By Monday the price had increased by 15%. What was the price of gas on Monday?

Change			% of change
Original Value		100	

What was the price of gas on Monday?

8. A phone that normally costs \$120 is on sale for \$108. By what percent was the price marked down?

Change			% of change
Original Value		100	

9. ***CHALLENGE PROBLEM***

If the 32 ounce bottle is 20% more than the typical bottle, how many ounces are in the typical bottle?

Change

Original Value	100

% of change

How many ounces are in the typical bottle?