

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Aim: How do we find the percent of change?**

**Do Now:** At the Acme Balloon Fiesta, 145 hot-air balloons participated in 2009. In 2010, 215 hot-air balloons participated. By what percent did the number of balloons increase from 2009 to 2010?

**What is a percent of change?**

A percent of change indicates how much a quantity \_\_\_\_\_.

**I. Finding Percent of Change**

Use the formula:

1.) \_\_\_\_\_

2.) \_\_\_\_\_

3.) \_\_\_\_\_

1.) A bicycle sold for \$220 last year. This year, the bicycle is \$253. What is the percent of increase in price?

2.) In a certain area in California, lightning started 35 forest fires in one month. The following month, the number of forest fires dropped to 21. What was the percent of decrease?

3.) Find the percent change  
original 150  
new 189

**II. Finding New Amount (if you know the percent change)**

To find the **new amount** knowing the percent of change:

1.) \_\_\_\_\_  
change = \_\_\_\_\_

2.) \_\_\_\_\_

4. The population of a city is 12,000 people. The population is expected to increase 15% in 10 years. What is the expected population in 10 years?

5. There were about 198,000 spectators at an action sports event last year. This year, the number of spectators decreased by about 12% from last year. About how many spectators were there this year?

6. Find the new amount: increase 45 by 20%

7. Find the new amount: decrease 85 by 28%