

# Percent Increase and Decrease

$$\frac{\text{Difference}}{\text{Original}} \times 100$$

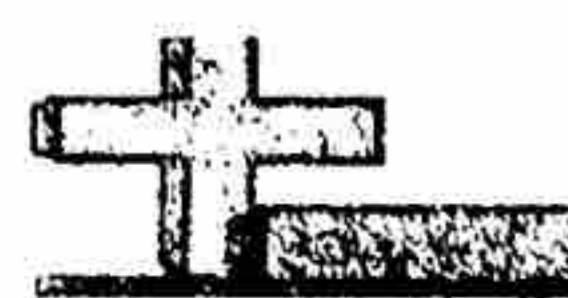
1. You bought an antique porcelain doll for \$15 at an estate sale. You get it appraised and you are told that the doll is worth \$150. What was the percent increase?
2. During a weight loss challenge your friend goes from 125 pounds to 100 pounds. What was the percent weight loss?
3. The number of visitors to a web site went from 140 to 160 over a two month period. What is the percent increase in the number of visitors for the two months? (Round to the nearest whole number)
4. Your neighbor had to drop the selling price of her home from \$180,000 to \$165,000. What percent did the price get lowered? (Round to the nearest tenth)
5. Your boss gave you a raise. Your weekly salary went from \$375 to \$450. What was your percent raise?
6. Flood waters decreased in depth from 15 inches to 8 inches. What was the percent decrease? Do not write a repeating decimal and do not round! (Write your answer as a mixed number)

# Percent Change

1. Find the percent of change: from 30 to 39
2. Find the percent of change: from 280 to 126
3. A computer that cost \$1,099 last year costs \$999 this year. What is the percent of change in price?
4. A racing bicycle that cost \$1,500 new costs \$845 used. What is the percent of change in price?
5. In the United States in the 20<sup>th</sup> century, average life expectancy increased from about 47 years to about 77 years. Find the percent of increase.
6. Find the percent of change: from 48 to 60
7. Find the percent of change: from 60 to 48
8. A 7<sup>th</sup> grader solved the following: Dario is finding the percent change from \$52 to \$125. What was his mistake?

$$\frac{\$125 - \$52}{\$125} = 0.58$$

or 58%



Solve each problem.

Answer

- 1) Roger spent 22 minutes on his math homework and 25.08 minutes on his spelling homework. He spent \_\_\_\_\_ percent more time on his spelling homework.
- 2) It used to take Lana 7 minutes to do 20 multiplication problems. Now she can do the same page in 7.7 minutes. She is now \_\_\_\_\_ percent faster.
- 3) A library normally collected \$54.00 in fees a month. But in March they collected \$79.92. What is the percent increase in the number of fees collected in March?
- 4) A game normally cost \$57.00, but Janet used a coupon and got the game for \$49.02. The coupon was for \_\_\_\_\_ percent off.
- 5) A pole was supposed to be 13 meters long, but it was accidentally made 17.68 meters long. The pole is \_\_\_\_\_ percent longer than it needs to be.
- 6) A store sold 14.00 dollars worth of gift cards in October. The next month the goal was to sell \$18.20 worth of gift cards. This is an increase of \_\_\_\_\_ percent.
- 7) The price for internet on a phone was \$7.00 a month, but starting in November the price will be \$7.84 a month. This is a \_\_\_\_\_% increase.
- 8) Last year a fishing license cost \$60.00. This year the license will cost \$38.40. This is a \_\_\_\_\_ percent decrease.
- 9) In the spring the average score for a division worksheet was 88. But back in the fall the average score was 66.88. The fall score was \_\_\_\_\_% lower than the spring score.
- 10) Last years phone model had a battery that lasted 12 hours. This year the battery only last for 8.16 hours. What was the percent the battery life decreased?

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_