

Simple Interest and Percent Change

**Simple Interest = Principal x Rate(% per year) x Time (in years)**

1. Find the simple interest and the final amount.
  - a. \$400 for 2 years @ 4% p.a.
  - b. \$8000 for 3 months at 7.25% p.a.
  - c. \$280 for 5 years and 3 months at 2.5% p.a.
  - d. \$575 for 124 days at 12.5% p.a.
2. Mr. Leonard put in a certain amount of money at 5.25% p.a. for 1 year and received \$56 in interest. How much did he put in the bank?
3. In how many years will \$500 yield \$140 in simple interest at 7% p.a.?
4. At what rate p.a. will \$350 amount to \$450 in 5 years? (assume simple interest)

$$\% \text{ change} = \left( \frac{\text{the amount of change}}{\text{original value}} \times 100 \right) \%$$

1. Find the Percent change if a quantity changes from:
  - a. 60 to 48
  - b. 2 to 7
  - c.  $\frac{1}{2}$  to  $\frac{1}{3}$
  - d. 0.25 to 0.3
  - e. 8% to 7.5%
  - f. 25% to 90%
  - g. 8.7mL to 10mL
  - h. 25¢ to \$26.5
2. The price of a car decreases by 12% a year. What will the price of a \$34500 Dodge Ram be after 2 years?
3. The price of a house has increased by 3% since last year. If it cost \$200 000 now, what was the worth of the house last year?
4. According to the CPI (consumer price index), a \$19 item from 1950 cost \$119.5 in 1990,
  - a. find the percent increase.
  - b. find the price of a \$2 1950 pen in 1990.
  - c. find the cost of a \$100 1990 jacket back in 1950.