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Module 7 Ratio, Proportion, and Percent

Find each percent of change. Tell if it is a percent of increase or decrease.

1. Original amount: 5
New amount: 1
2. Original amount: 44

New amount: 40
3. Original amount: 6

New amount: 18
4. Student enrollment at one school has increased $32 \%$ from its original enrollment of 300 students. What is the school's enrollment now?
5. The cost of a shirt was reduced from $\$ 20$ to $\$ 14$. Find the percent of decrease.
6. A movie theater is increasing the cost of all of its tickets. Complete the chart below.

| Type of Ticket | Original Cost | Percent of Increase | New Cost |
| :---: | :---: | :---: | :---: |
| Child | $\$ 4$ | $12.5 \%$ |  |
| Adult | $\$ 8$ |  | $\$ 8.75$ |
| Senior Citizen |  | $25 \%$ | $\$ 5$ |

## Find the amount of simple interest.

7. $P: \$ 50$
$r: 10 \%$
8. $P: \$ 250$
$r: 3.5 \%$
$t: 3$ years
$t: 5$ years
9. $P: \$ 1,400$
$r: 7 \%$
$t$ : 9 months
10. Alex saved $\$ 500$ at an interest rate of $4 \%$ compounded monthly. Complete the table below to find the new amount after three months.

| Month | Principal | Prt | Interest | New Amount |
| :---: | :---: | :---: | :---: | :---: |
| $\mathbf{1}$ | $\$ 500$ | $\$ 500(0.04)$ | $\left(\frac{1}{12}\right)$ | $\$ 1.67$ |
| $\mathbf{2}$ | $\$ 501.67$ |  |  |  |
| $\mathbf{3}$ |  |  |  |  |

11. Diane will save $\$ 2,000$ for two years.
a. How much interest will she earn if the interest rate is $6.75 \%$ compounded annually?
b. How much more interest would she earn if the interest was compounded semiannually?
