

Compound Interest Formula



Use the compound interest formula to calculate the ending balance for the following. Express your answer as a dollar amount to the nearest cent.

Principal amount = \$93,418

Percent of interest = 2.7

Years = 6

Compounded monthly

$$A = P \left(1 + \frac{r}{n} \right)^{nt}$$



Use the compound interest formula to calculate the interest earned for the following. Express your answer as a dollar amount to the nearest cent.

Principal amount = \$71,620

Percent of interest = 9.9

Years = 5

Compounded annually

$$A = P \left(1 + \frac{r}{n} \right)^{nt}$$



Amy deposited \$8,514 into a savings account that earns 1.3% interest, and interest is compounded monthly. If she made no other deposits or withdrawals, how much will the balance be in the account after 4 years? Express your answer as a dollar amount to the nearest cent.

$$A = P \left(1 + \frac{r}{n} \right)^{nt}$$

Jacob deposited \$6,208 into a savings account that earns 0.1% interest, and interest is compounded annually. If he made no other deposits or withdrawals, how interest will be earned by the account after 5 years? Express your answer as a dollar amount to the nearest cent.

$$A = P \left(1 + \frac{r}{n} \right)^{nt}$$

Use the compound interest formula to calculate the ending balance for the following. Express your answer as a dollar amount to the nearest cent.

Principal amount = \$68,404

Percent of interest = 9.8

Years = 3

Compounded semi-annually

$$A = P \left(1 + \frac{r}{n} \right)^{nt}$$

Use the compound interest formula to calculate the interest earned for the following. Express your answer as a dollar amount to the nearest cent.

Principal amount = \$52,579

Percent of interest = 3.4

Years = 5

Compounded semi-annually

$$A = P \left(1 + \frac{r}{n} \right)^{nt}$$

Shelly deposited \$8,206 into a savings account that earns 9.2% interest, and interest is compounded annually. If she made no other deposits or withdrawals, how interest will be earned by the account after 2 years? Express your answer as a dollar amount to the nearest cent.

$$A = P \left(1 + \frac{r}{n} \right)^{nt}$$