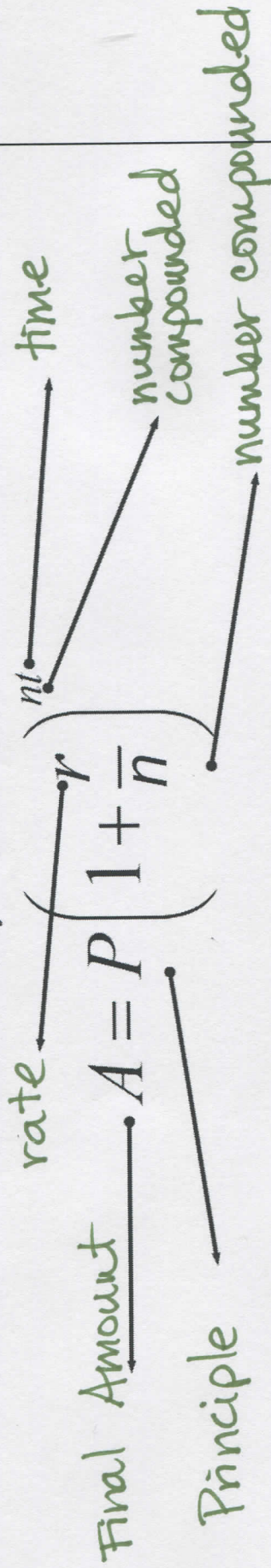


OBJECTIVE 6: Compound Interest

*** rate is always a decimal!***



TASK 7: Copy the formula above and label each part. I will give you the new variable.

A = Final Amount

P = principle (starting Amount)

r = rate as a decimal

n = number of times the interest is compounded

quarterly = 4

daily = 365

monthly = 12

t = number of years

12 months = 1 year so t = 1

6 months = half a year so t = 0.5

TASK 8: Apply the compound interest formula from above to this real-world scenario

a) You deposit \$9000 in an account that pays 1.46% annual interest. Find the balance after 3 years when the interest is compounded quarterly.

$$A = ?$$

$$P = 9000$$

$$r = 1.46\% \rightarrow 0.0146$$

$$t = 3 \quad n = 4$$

$$A = 9000 \left(1 + \frac{0.0146}{4}\right)^{12}$$

$$A = \boxed{\$9,402.21}$$

b) You deposit \$8600 in an account that pays 1.32% annual interest. Find the balance after 4 years when the interest is compounded quarterly.

$$A = ?$$

$$P = 8600$$

$$r = 1.32\% \rightarrow 0.0132$$

$$t = 4$$

$$n = 4$$

$$A = 8600 \left(1 + \frac{0.0132}{4}\right)^{16}$$

$$A = \boxed{\$9,065.49}$$

Notes to myself about the lesson that I do not want to forget:

% \rightarrow decimal : move decimal left 2 spots

use your calculator, and use () to separate operations

Still need help with: