

Section/Lesson Title: Simple Interest

Materials: WS

HW# S.L. WS

Reflections:

**Interest** - The Fee charged for the use of money

### Simple Interest

Calculated only on the principal and only at the end of the specified time

$$I = Prt$$

- ① If you deposit \$1500 in an account for 3 years at 9%, how much do you earn (in simple interest)?

$$I = 1500(.09)(3) = \boxed{\$405}$$

- ② Find the annual interest rate if you earned \$500 on \$2,000 for 18 months.

$$I = Prt$$

$$500 = 2000(.15)r$$

$$r = .0278 \quad \boxed{2.78\%}$$

TOTAL Amount  $\rightarrow$

$$\begin{aligned} A &= P + I \\ &= P + Prt \\ &= P(1 + rt) \end{aligned}$$

$$\boxed{A = P(1 + rt)}$$

- ③ How long will it take to turn \$5000 into \$5600 at 2.7%?

$$5600 = 5000(1 + .027t)$$

$$\boxed{t = 4.4 \text{ years}}$$