SECTION 3.2 - SIMPLE INTEREST

Formulas: $I = Prt$ and $F = P(1 + rt)$.

1. Jimmy is putting $500 into his savings account which earns simple interest at a rate of 5.5% per year. At the end of 10 years (assuming that the $500 is still there), how much money will he have in his account?

$$F = 500(1 + (.055)(10))$$
$$= 500(1.55)$$
$$F = \$775$$

2. Ronaldo borrows $1500 from the bank and, 42 months later pays them back $1625. If we assume simple interest, what is the interest rate?

$$1625 = 1500(1 + 3.5r)$$
$$1.0833 = 1 + 3.5r$$
$$.0833 = 3.5r$$

$$r = .0238$$
$$r = 2.38\%$$

3. 20 years ago, Mr. Garrison invested a certain sum of money. At the time of the investment, the interest rate was 4.5%. At the present, his investment is worth $202,500. What was the amount of his original investment?

$$202,500 = P(1 + (.045)(20))$$
$$202,500 = P(1.9)$$
$$P = \$106,528.95$$