

NAME _____

DATE _____

SIMPLE INTEREST: Worksheet 2

Using $I = prt$, find the following.

- 1) Principal = \$4,900
Interest rate = 7%
Time = 5 years
- 2) Principal = \$2,200
Interest rate = 9%
Time = 30 months
- 3) Principal = \$15,400
Interest rate = 5.5%
Time = 6 years
- 4) Noah & Susan borrowed \$105,000 to purchase their first home. The interest rate for this mortgage was 3.6%. The loan was set up for 25 years. How much interest will they pay over the 25 year time period?
- 5) Sandra borrowed \$5,800 to buy a used car. She plans to pay it back over 48 months with a 6% interest rate. What will Sandra's total cost be to purchase the car?

*The **GED Pyramids Shortcut Video #11** will explain how we arrive at the formulas below.*

- 6) $p = \frac{I}{rt}$ Interest = \$1100 Interest rate = 11% Time = 2 years Find the principal.
- 7) $r = \frac{I}{pt}$ Principal = \$7,600 Time = 3.5 years Interest = \$2261 Find the Interest rate.
- 8) $t = \frac{I}{pr}$ Interest rate = 4% Principal = \$14,800 Interest = \$2,960 Find the time.

KEY

SIMPLE INTEREST: Worksheet 2

Using $I = prt$, find the following.

1) Principal = \$4,900 $I = 4,900 \times .07 \times 5$
 Interest rate = 7% $I = \$1,715$
 Time = 5 years

2) Principal = \$2,200 $I = 2,200 \times .09 \times 2.5$
 Interest rate = 9% $I = \$495$
 Time = 30 months

3) Principal = \$15,400 $I = 15,400 \times .055 \times 6$
 Interest rate = 5.5% $I = \$5,082$
 Time = 6 years

4) Noah & Susan borrowed \$105,000 to purchase their first home. The interest rate for this mortgage was 3.6%. The loan was set up for 25 years. How much interest will they pay over the 25 year time period?

$$I = 105,000 \times .036 \times 25$$

$$I = \$94,500$$

5) Sandra borrowed \$5,800 to buy a used car. She plans to pay it back over 48 months with a 6% interest rate. What will Sandra's total cost be to purchase the car?

$$I = 5,800 \times .06 \times 4 \qquad \text{Total} = \$5,800 + \text{Interest}$$

$$I = \$1,392 \qquad \text{Total} = \$5,800 + \$1,392$$

$$\qquad \qquad \qquad \text{Total} = \$7,192$$

The **GED Pyramids Shortcut Video #11** will explain how we arrive at the formulas below.

6) $p = \frac{I}{rt}$ Interest = \$1,100 Interest rate = 11% Time = 2 years Find the principal.

$$p = \frac{1,100}{.11 \times 2} = \$5,000$$

7) $r = \frac{I}{pt}$ Principal = \$7,600 Time = 3.5 years Interest = \$2,261 Find the Interest rate.

$$r = \frac{2,261}{7,600 \times 3.5} = .085 = 8.5\%$$

8) $t = \frac{I}{pr}$ Interest rate = 4% Principal = \$14,800 Interest = \$2,960 Find the time.

$$t = \frac{2,960}{14,800 \times .04} = 5 \text{ yrs}$$