

NAME _____

DATE _____

SIMPLE INTEREST: Worksheet 4

Using $I = prt$, find the following.

- 1) Principal = \$5,600
Interest rate = 7%
Time = 3 years
- 2) Principal = \$1,260
Interest rate = 14%
Time = 30 months
- 3) Principal = \$18,500
Interest rate = 5.2%
Time = 6 years
- 4) Mike & Carol borrowed \$112,000 to purchase their first home. The interest rate for this mortgage was 3.8%. The loan was set up for 20 years. How much interest will they pay over the 20 year time period?
- 5) Jayson borrowed \$3,200 to buy a used car. He plans to pay it back over 36 months with a 9% interest rate. What will Jayson'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 = \$1,968 Interest rate = 6% Time = 4 years Find the principal.

7) $r = \frac{I}{pt}$ Principal = \$3,400 Time = 2.5 years Interest = \$765 Find the Interest rate.

8) $t = \frac{I}{pr}$ Interest rate = 12% Principal = \$8,000 Interest = \$3,840 Find the time.

KEY

SIMPLE INTEREST: Worksheet 4

Using $I = prt$, find the following.

1) Principal = \$5,600 $I = 5,600 \times .07 \times 3$
 Interest rate = 7% $I = \$1,176$
 Time = 3 years

2) Principal = \$1,260 $I = 1,260 \times .14 \times 2.5$
 Interest rate = 14% $I = \$441$
 Time = 30 months

3) Principal = \$18,500 $I = 18,500 \times .052 \times 6$
 Interest rate = 5.2% $I = \$5,772$
 Time = 6 years

4) Mike & Carol borrowed \$112,000 to purchase their first home. The interest rate for this mortgage was 3.8%. The loan was set up for 20 years. How much interest will they pay over the 20 year time period?

$$I = 112,000 \times .038 \times 20$$

$$I = \$85,120$$

5) Jayson borrowed \$3,200 to buy a used car. He plans to pay it back over 36 months with a 9% interest rate. What will Jayson's total cost be to purchase the car?

$$I = 3,200 \times .09 \times 3 \qquad \text{Total} = \$3,200 + \text{Interest}$$

$$I = \$864 \qquad \text{Total} = \$3,200 + \$864$$

$$\qquad \qquad \qquad \text{Total} = \$4,064$$

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

6) $p = \frac{I}{rt}$ Interest = \$1,968 Interest rate = 6% Time = 4 years Find the principal.

$$p = \frac{1,968}{.06 \times 4} = \$8,200$$

7) $r = \frac{I}{pt}$ Principal = \$3,400 Time = 2.5 years Interest = \$765 Find the Interest rate.

$$r = \frac{765}{3,400 \times 2.5} = .09 = 9\%$$

8) $t = \frac{I}{pr}$ Interest rate = 12% Principal = \$8,000 Interest = \$3,840 Find the time.

$$t = \frac{3,840}{8,000 \times .12} = 4 \text{ yrs}$$