

When solving the simple interest formula for values other than the interest, you must:

- 1) enter the values for the other variables
- 2) multiply each value together on the right side of the equation
- 3) divide both sides of the equation by the value in front of the variable

Example: \$52,000 is invested in an account that earns 5.75% annually. The interest earned is \$4,485. How much time was the money invested for?

$$4485 = (52,000)(.0575)(t)$$

$$4485 = (2990)(t)$$

$$\frac{4485}{2990} = \frac{2990 \cdot t}{2990}$$

$$1.5 = t$$

For problems #7-9, find the value of the missing element (Either **I**, **P**, **r**, or **t**). Show all work in the box provided.

7)

$$p = \$20,000$$

$$r = 14\% \text{ per year}$$

$$I = \$18,200$$

$$t = \underline{\hspace{2cm}}$$

8) The simple interest on a \$12,000 loan for 1.5 years is \$2295. What is the interest rate?

9) How much is in a savings account if the interest for $\frac{1}{2}$ of a year at 6.5% simple interest is \$487.50?

Name: _____

Simple Interest Practice Worksheet

The formula for finding simple interest is:

$$\text{Interest} = \text{Principal} * \text{Rate} * \text{Time. } (I = P \times r \times t)$$

Example:

If \$100 was borrowed for 2 years at a 10% interest rate, the interest would be:

$$I = (\$100)(.10)(2)$$

$$I = \$20.00$$

In problems #1-6, find the interest. Show all work in the box provided.

- 1)
p = \$2,500
r = 13% per year
t = 4 years

- 2) The amount
borrowed for 6
months is \$600 at a
yearly interest rate of
9%.

- 3) \$750 invested for
six years at 10.5%
per year.

- 4) A mortgage of
\$325,000 at 7.75%
for 30 years.

- 5) A savings of \$5000
that earns 7.25%.

- 6) A \$4000 loan for
21 months at a rate
of 13.5%.

Simple Interest

$$I = P \cdot r \cdot t$$

	Interest	Principal	Rate	Time
1.		\$1,050	4.5%	2 years
2.	\$22.50		3%	3 years
3.		\$500	5%	3 months
4.	\$43.75	\$2500	3.5%	

Show work here for 1 – 4

1.

2.

3.

4.

5. If the initial investment in an account was \$1,200, earning 3.9%, for 8 months, what is the interest earned?
6. How long would an \$800 investment take to earn \$160 at a rate of 5% annually?
7. What is the interest rate if you earned \$504 on an \$1800 investment for 4 years?

Simple Interest

Interest is the money paid on a loan. The borrower (you) pays the interest. The lender (the bank) earns the interest. Interest is also paid to you by the bank for money you invest for a short period of time.

The Interest is calculated based on:

_____ (P) (the amount borrowed or Invested),
_____ (r) the rate (as a decimal), and
_____ (t) a period of time.

$$\text{Interest} = \text{Principal} \cdot \text{Rate} \cdot \text{Time}$$
$$I = P \cdot r \cdot t$$

Finding the Interest

1. Calculate the simple interest on a loan of \$3500 for a period of 2 years at an annual rate of 5%.

Finding the Principal

2. If the interest earned on an investment was \$288 for 6 years and the interest rate was 4%, what was the initial investment?

Finding the Interest Rate

3. \$2500 was invested for 3 years and earned \$450 in interest. Find the rate of interest.

Find the Period of time for the loan or investment

4. An investment of \$3000 at a yearly rate of 6.5% earned \$390 in interest. Find the period of time for which the money was invested.