REVIEW: Simple Interest

Name _____

Key Concept and Vocabulary

time in years

$I = Prt$

$\$100 = (\$1000)(0.05)(2)$

interest   principal   rate as decimal

Simple Interest
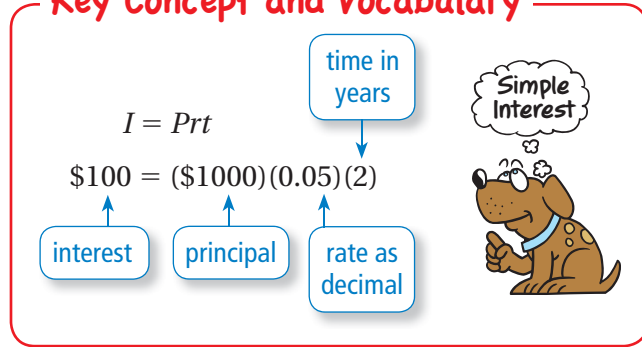
Visual Model

1 month	3 months	4 months
$t = \dfrac{1}{12}$	$t = \dfrac{1}{4}$	$t = \dfrac{1}{3}$

6 months	1 year	2 years
$t = \dfrac{1}{2}$	$t = 1$	$t = 2$

Skill Examples

1. $P = \$200$, $r = 0.10$, $t = 4$ years
   $I = (200)(0.10)(4) = \$80$

2. $P = \$250$, $r = 0.04$, $t = 0.5$ year
   $I = (250)(0.04)(0.5) = \$5$

3. $P = \$2000$, $r = 0.05$, $t = 20$ years
   $I = (2000)(0.05)(20) = \$2000$

Application Example

4. You deposited $500 in a savings account for 10 years. The account paid 6% simple interest. How much interest did you earn?

   $P = \$500$, $r = 0.06$, $t = 10$ years
   $I = (500)(0.06)(10) = \$300$

   :•: You earned $300 in interest.

PRACTICE MAKES PURR-FECT™

Find the simple interest.

5. Principal: $400, Rate: 5%, Time: 3 years

   _____

6. Principal: $100, Rate: 3%, Time: 6 months

   _____

7. Principal: $1000, Rate: 2%, Time: 4 months

   _____

8. Principal: $250, Rate: 10%, Time: 6 months

   _____

9. Principal: $500, Rate: 8%, Time: 9 months

   _____

10. Principal: $600, Rate: 1%, Time: 8 years

   _____

In which savings account do you earn more simple interest?

11. **a.** Deposit $200 at 6% for 3 years.
    b. Deposit $200 at 8% for 18 months.

   _____

12. **a.** Deposit $1000 at 4% for 5 years.
    b. Deposit $1000 at 5% for 4 years.

   _____

13. **SAVINGS** You deposited $600 in a savings account for 5 years. The account paid 4% simple interest. How much interest did you earn? _____

14. **LOAN** You borrowed $1000 for 2 years. You are charged 5% simple interest. How much interest do you owe? _____