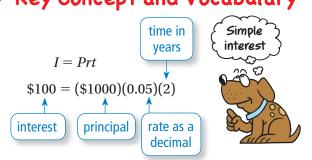
Key Concept and Vocabulary



Visual Model

1 mon	th	3 months	4 months
$t = \frac{1}{12}$	2	$t = \frac{1}{4}$	$t = \frac{1}{3}$

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

Skill Examples

1.
$$P = $200, r = 0.10, t = 4 \text{ years}$$

 $I = 200(0.10)(4) = 80

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

3.
$$P = $2000, r = 0.05, t = 20 \text{ years}$$
 $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?

$$P = $500, r = 0.06, t = 10 \text{ years}$$

 $I = 500(0.06)(10) = 300

• You earned \$300 in interest.

PRACTICE MAKES PURR-FECT®

Check your answers at BigIdeasMath.com. -

Find the simple interest.

- **5.** Principal: \$400, Rate: 5%, Time: 3 years
- **7.** Principal: \$1000, Rate: 2%, Time: 4 months
- **9.** Principal: \$500, Rate: 8%, Time: 9 months

- **6.** Principal: \$100, Rate: 3%, Time: 6 months
- **8.** Principal: \$250, Rate: 10%, Time: 6 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? _____