

SKILL

50

Skills Readiness**Simple Interest**

Finding the Amount of Interest	Finding the Interest Rate
<p>Simple Interest Formula: $I = Prt$</p> <p>P = principle (the amount invested)</p> <p>r = interest rate (written as a decimal)</p> <p>t = time (number of <u>years</u>)</p>	<p>Solve the Simple Interest Formula for r by dividing both sides of the equation by Pt.</p> $\frac{I}{Pt} = \frac{Prt}{Pt} \longrightarrow r = \frac{I}{Pt}$
<p>Example 1: What is the simple interest on an investment of \$3000 at 4% for 5 years?</p> $I = Prt$ $P = \$3000; r = 4\% = 0.04; t = 5$ $I = (3000)(0.04)(5)$ $I = \$600$	<p>Example 2: A savings account of \$1000 earned \$120 simple interest in 4 years. Find the interest rate.</p> $r = \frac{I}{Pt}$ $I = \$120; P = \$1000; t = 4$ $r = \frac{120}{1000(4)} = 0.03 = 3\%$

Practice on Your Own
Evaluate.

1. $(500)(0.03)(5)$ _____ 2. $(4000)(0.02)(10)$ _____ 3. $\frac{120}{(1500)(4)}$ _____

Use the formula for simple interest, $I = Prt$, to answer the question.

4. What is the simple interest on an investment of \$5000 at 2% for 3 years? _____
5. What is the simple interest on an investment of \$1800 at 4% for 2 years? _____
6. What is the simple interest on an investment of \$10,000 at 4% for 5 years? _____
7. A savings account of \$2500 earned \$225 simple interest in 3 years. Find the interest rate. _____
8. A certificate of deposit in the amount of \$25,000 earned \$2000 simple interest in 2 years. Find the interest rate. _____

Check
Evaluate.

9. $(1000)(0.05)(4)$ _____ 10. $(2500)(0.04)(5)$ _____ 11. $\frac{180}{(6000)(2)}$ _____

Use the formula for simple interest, $I = Prt$, to answer the question.

12. What is the simple interest on an investment of \$8000 at 6% for 5 years? _____
13. What is the simple interest on an investment of \$75,000 at 8% for 2 years? _____
14. A savings account of \$50,000 earned \$25,000 simple interest in 10 years. Find the interest rate. _____