

**Algebra 1: 5.1 Homework**  
**Simple and Compound Interest**

Name \_\_\_\_\_ Period \_\_\_\_\_

1. Find the total amount for each year and the amount of simple interest per year if you borrow \$5,000 at 12%.  $A = P + (Pr)t$ .

	Total Amount	Interest Only
Year 1		
Year 2		
Year 3		
Year 4		
Year 5		

2. Do you notice a pattern in the “interest only” column of problem 1? What does it mean?
3. Find the total amount for each year and the amount of compound interest per year if you borrow \$5,000 at 12%.  $A = P(1 + r)^t$ . Round to the nearest **100th**.

	Total Amount	Interest Only
Year 1		
Year 2		
Year 3		
Year 4		
Year 5		

4. Find the total amount for both simple interest and compound interest. Round to the nearest 100th.

**Simple Interest:**  $A = P + (Pr)t$

**Compound Interest:**  $A = P(1 + r)^t$

- a. \$2,000 at 12% for 3 years

Simple	Compound

- b. \$5,000 at 12% for 20 years

Simple	Compound

5. If you owe money would you rather be charged simple or compound interest? Why?

6. If you deposited money in the bank would you rather earn simple or compound interest? Why?