

Answer Key

Worksheet 2: Interest and Percent Growth

Directions: Answer each of the following questions using your knowledge of percent, interest, and principal. You have ten minutes to complete this assignment. You may use your phone or calculator to answer the questions but be sure to show all work.

1. You invest \$1,000 with an interest rate of 7% annually.

a. How much interest will you earn after one year?

$$1000 \times 0.07 = 70$$

b. How much total money will you have after one year including both the *principal* and the interest earned?

$$1000 + 70 = 1070 \text{ or } 1000 \times 1.07 = 1070$$

2. Rose opens a bank account that earns 2.3% interest each year. She deposits \$3000.

a. How much interest will Rose earn after one year?

$$3000 \times 0.023 = 69$$

b. How much total money will Rose have after one year including the *principal* and interest earned?

$$3000 + 69 = 3069 \text{ or } 3000 \times 1.023 = 3069$$

3. Ivan saves all his money and has \$588.50. He deposits it all into an account that earns 1.4% each year.

a. How much interest will Ivan earn after one year?

$$588.50 \times 0.014 = 8.24$$

b. How much total money will Ivan have after one year?

$$588.50 + 8.24 = 596.74$$

4. Jamilla invests \$500 into a bank account earning 2%.

a. How much interest will Jamilla earn after one year?

$$500 \times 0.02 = 10$$

b. How much total money will Jamilla have after one year?

$$500 + 10 = 510$$

c. What is 102% of 500?

$$510$$

d. What do you notice about your answers to 4c and 4d? Why do you think this is?

They are the same because both show a two percent growth.

5. Calculate:

100%	100% of 500 →		←	<i>Your principal</i>	
+	2%	2% of 500 →	+	←	<i>Your interest</i>
102%		102% of 500 →		←	<i>Principal and Interest</i>

100%	100% of 500 →	500	←	<i>Your principal</i>		
+	2%	2% of 500 →	+	10	←	<i>Your interest</i>
102%		102% of 500 →	510	←	<i>Principal and Interest</i>	