**Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Advanced Algebra II – Assignment 2-8**

3-65 Kristin’s grandparents started a savings account for her when she was born. They invested $500 in an account that pays 8% compounded annually.

1. Write an equation to express the money in the account on Kristin’s xth birthday.
2. How much money is in the account on Kristin’s 16th birthday?
3. What are the domain and range of the equation that you wrote in

part (a)?

3-67 Consider the sequence 2, 8, 3y + 5, . . .

1. Find the value of y if the sequence is arithmetic.
2. Find the value of y if the sequence is geometric.

3-71 Find the domain and range for each of the relations graphed below.

a.

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| --- | --- | --- | --- |
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|  |  |  |  |

b.

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
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|  |  |  |  |
|  |  |  |  |

c.

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

3-84 Solve the systems of equations algebraically.

 2x – 3y = 12

 y + x = -9

**Algebra I Review**

1. y varies directly as x.
2. If x = 2.8 when y = 7, find x when y = -4
3. If x = 6.3 when y = 70, find y when x = 5.4.
4. If x = -5 when y = 2.5, find y when x = 6

d. If y =  when x = , find x when y = 

1. Solve each proportion
2.  b.  c. 