Unit 4 HW 5 Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_\_\_\_\_\_

1. Graph the equation to find the vertex and x-intercepts of the following quadratic: $y=2x^{2}-16x+24$
	1. Vertex: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
	2. X-intercepts: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

For #2-3,

a. Circle if each sequence is arithmetic, geometric, quadratic, or none of these.

b. Write a formula for the sequence **if it is arithmetic or geometric**.

c. Find the next three terms in each sequence.

1. 29, 23, 17, 11… Circle One: A G Q None

Formula (if A or G):

 Next 3 terms: \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

1. 29, 23, 19, 17… Circle One: A G Q None

Formula (if A or G):

 Next 3 terms: \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

1. **Solve the system of equations in 2 DIFFERENT ways.**

$$\left\{\begin{matrix}x-3y=-12\\2x+4y=36\end{matrix}\right.$$

|  |
| --- |
| **Substitution:** |
| **Elimination:** |
| **Graphing:** |