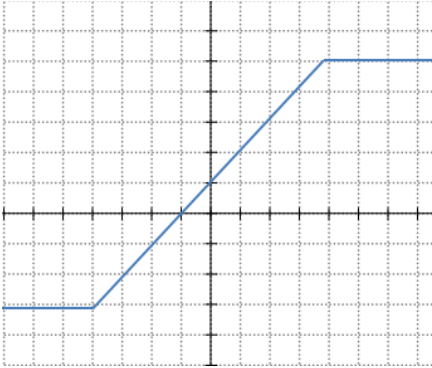
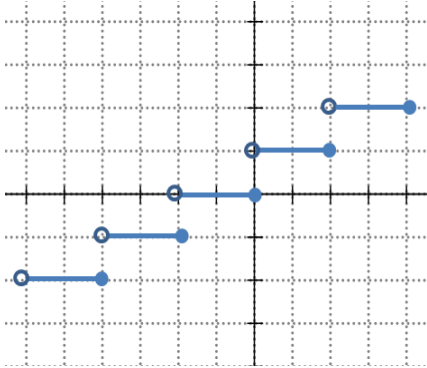
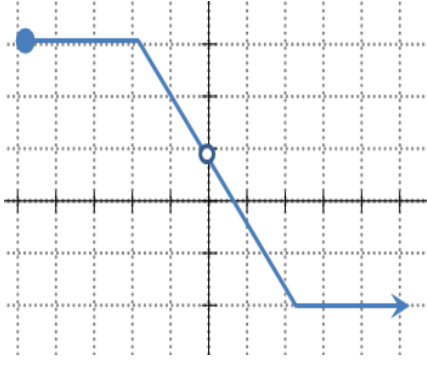
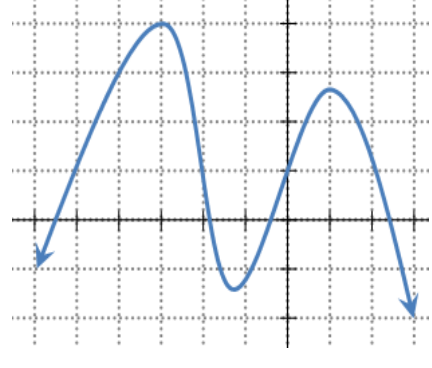
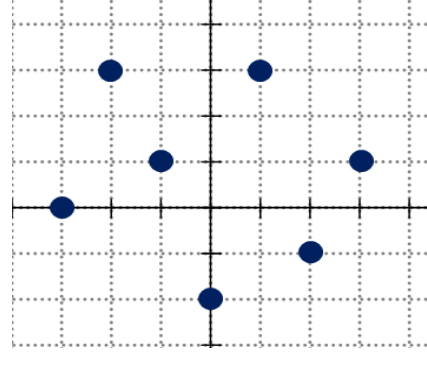
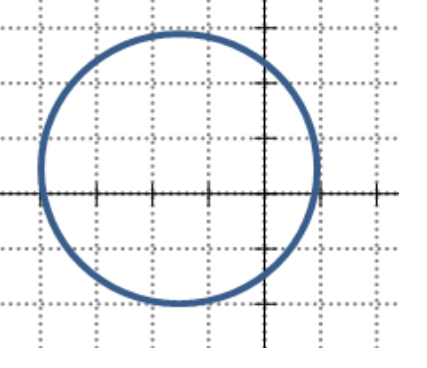
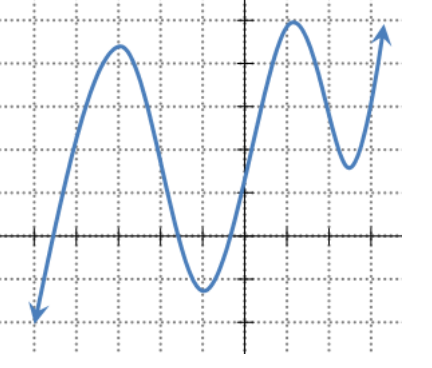
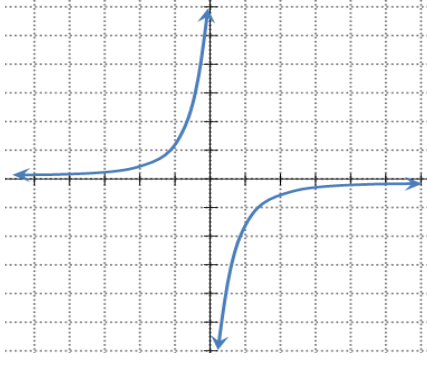
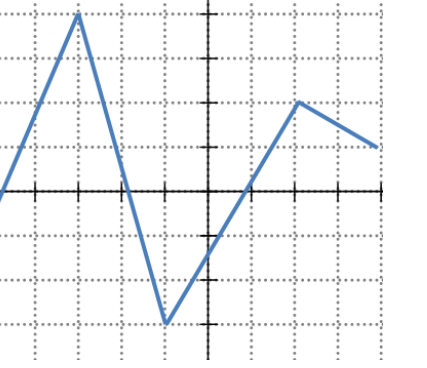


Name: _____

Date: _____

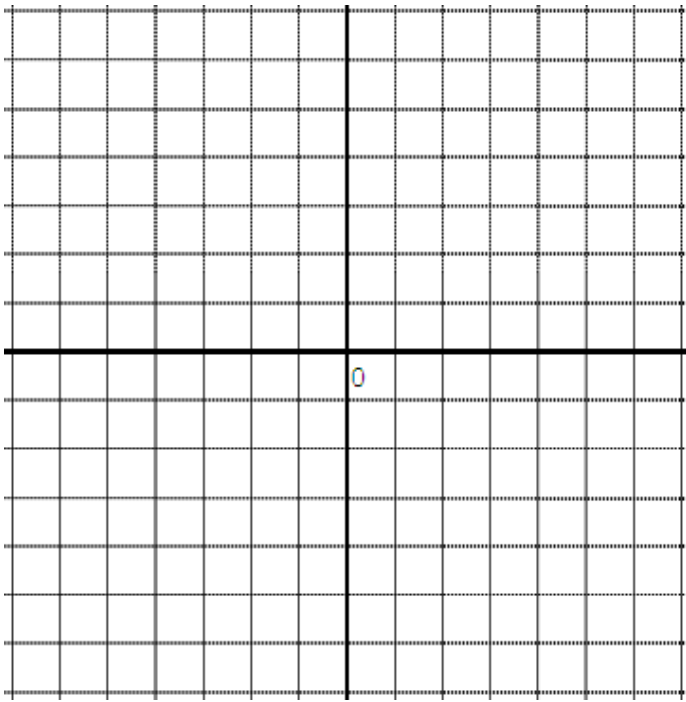
Pre Calculus 11: Section 3a Domain, Range, and Using your Ti-83

1. Given each of the following graphs, indicate the domain and range:

<p>a)</p>  <p>Domain:</p> <p>Range:</p>	<p>b)</p>  <p>Domain:</p> <p>Range:</p>	<p>c)</p>  <p>Domain:</p> <p>Range:</p>
<p>d)</p>  <p>Domain:</p> <p>Range:</p>	<p>e)</p>  <p>Domain:</p> <p>Range:</p>	<p>f)</p>  <p>Domain:</p> <p>Range:</p>
<p>g)</p>  <p>Domain:</p> <p>Range:</p>	<p>h)</p>  <p>Domain:</p> <p>Range:</p>	<p>i)</p>  <p>Domain:</p> <p>Range:</p>

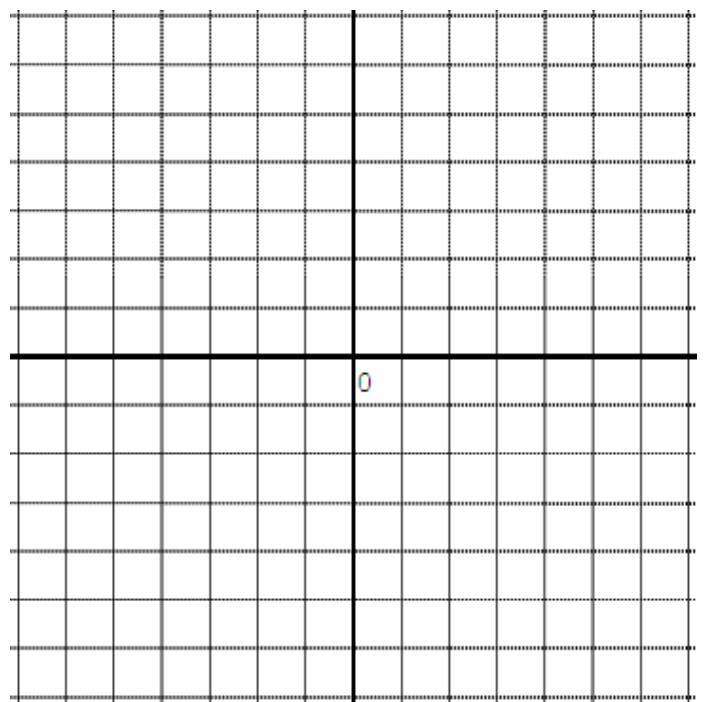
2. Given each function, graph it on your calculator, graph it on the grid provided, and find the following:

a) Equation: $y = 2x - 5$



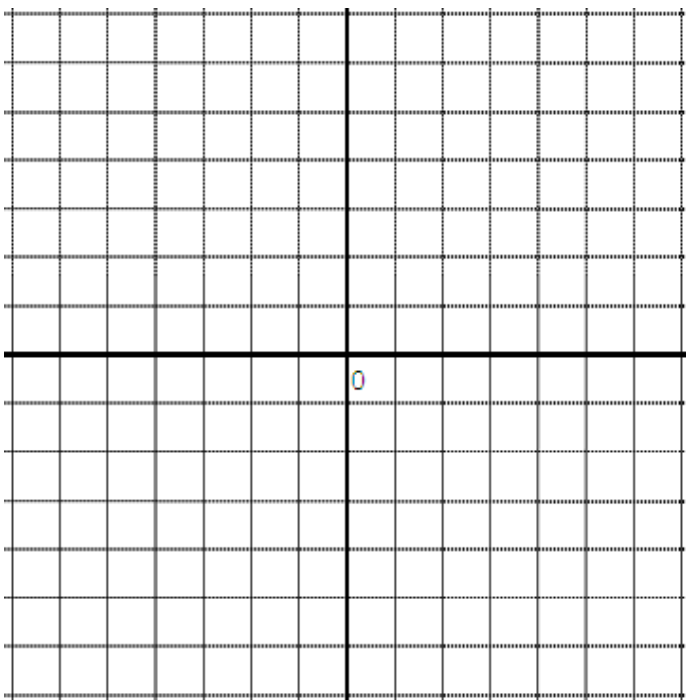
Y-Intercept: _____ X-intercept: _____

b) Equation: $y = x^2 - 8$



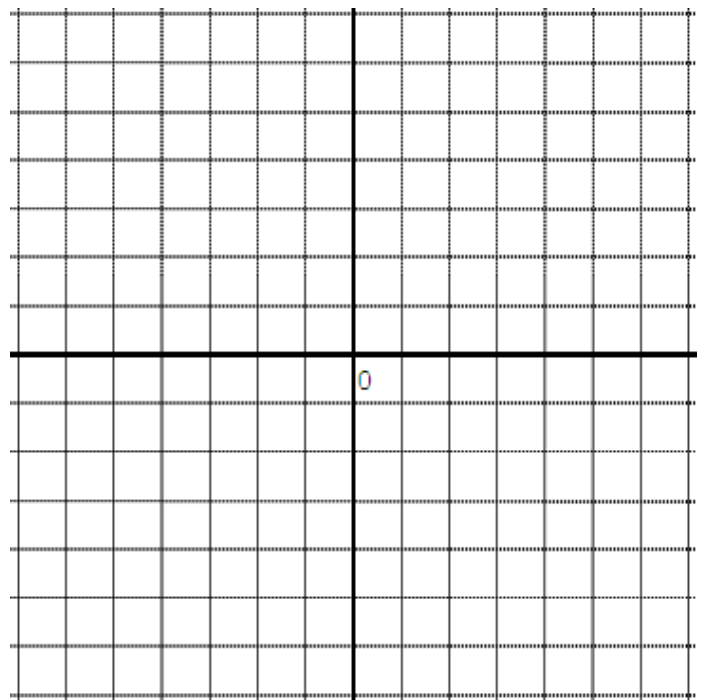
Y-Intercept: _____ X-intercept: _____

c) Equation: $y = 2x^2 - 3x - 10$



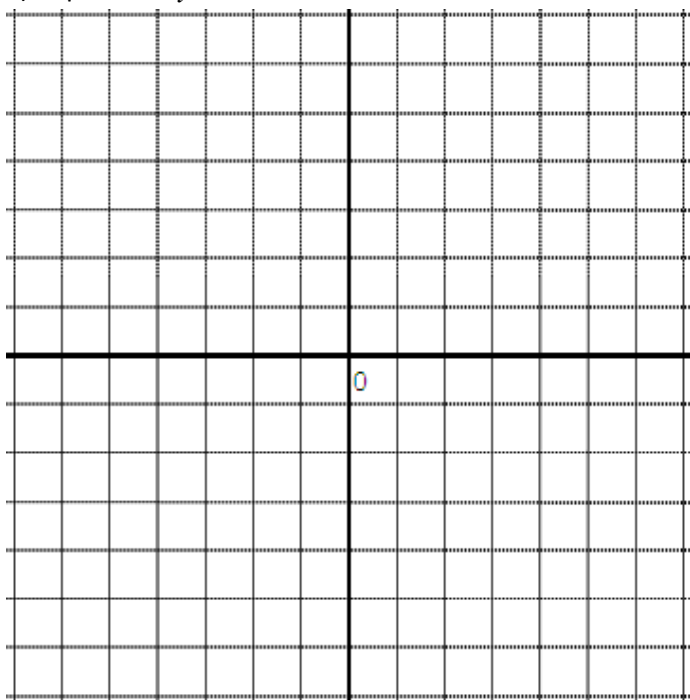
Y-Intercept: _____ Vertex: _____
X-intercept: _____

d) Equation: $y = -3x^2 + 8x + 12$



Y-Intercept: _____ Vertex: _____
X-intercept: _____

e) Equation: $y = -0.5x^2 + 8x + 20$



Y-Intercept: _____

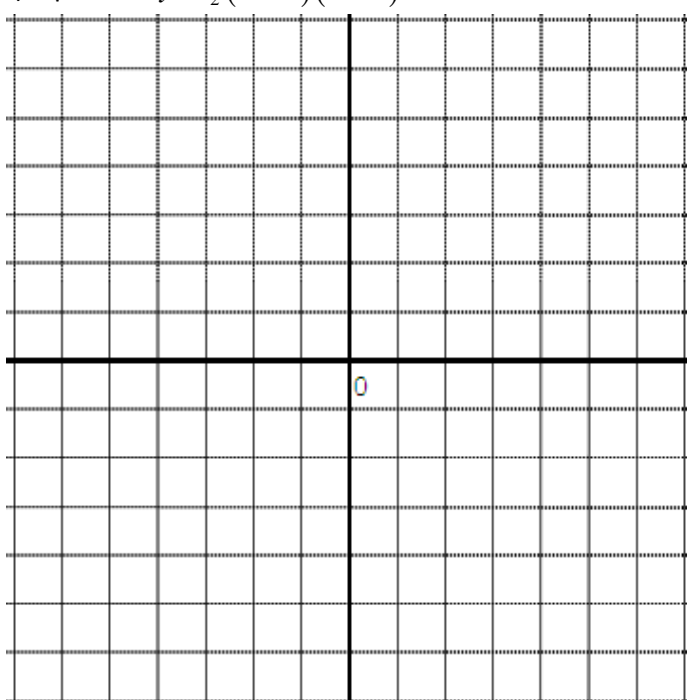
Vertex: _____

X-intercepts: _____

Domain: _____

Range: _____

f) Equation: $y = \frac{1}{2}(x-4)(x+5)$



Y-Intercept: _____

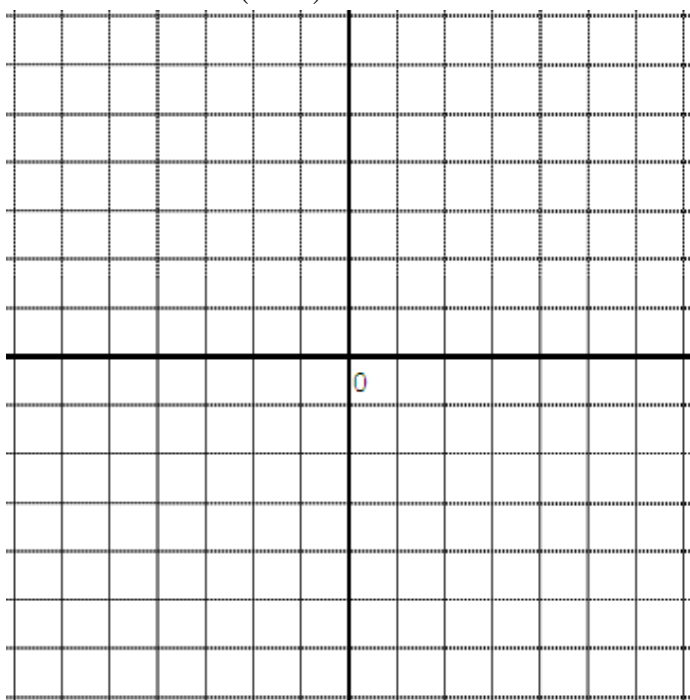
Vertex: _____

X-intercepts: _____

Domain: _____

Range: _____

g) Equation: $y = 2(x-4)^2 - 11$



Y-Intercept: _____

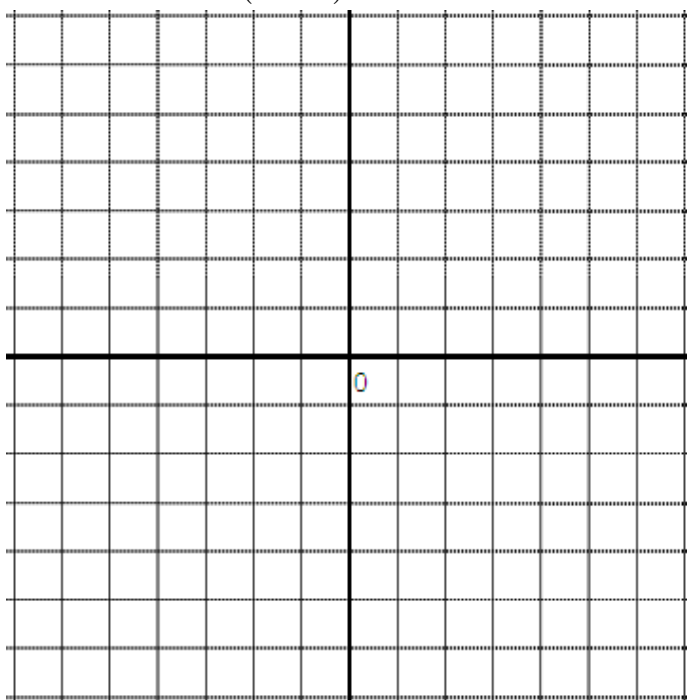
Vertex: _____

X-intercepts: _____

Domain: _____

Range: _____

h) Equation: $y = -(2x-4)^2 + 8$



Y-Intercept: _____

Vertex: _____

X-intercepts: _____

Domain: _____

Range: _____

3. Define the “*domain of a function*” using your own words:

4. What is the difference between domain and range?

5. How do you know that the domain or range of a function will be “all real numbers” $[x \in \mathbb{R}]$? Explain:

6. What is the domain of a quadratic function?

7. What is the domain and range of a linear function?

8. What is the domain and range of $y = \sqrt{2x-5} + 3$