

Name _____

Period _____ Date _____

Homework 4.1.5

1) Completely Factor each polynomial expression. (if possible) Write as: **Sum = Product**

a) $x^2 - 49$

b) $x^2 - 10x + 25$

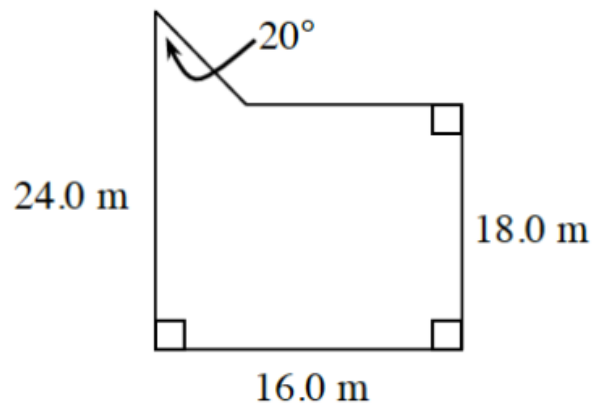
c) $4x^2 + 4x + 1$

d) $4x^2 - 64$

2) Calculate the area and the perimeter of the figure below. Hint: you will have to use some trigonometry to figure out some missing information.

a) Perimeter

b) Area



3) Complete the table below for the function: $y = x^2$

Use negative values, 0, and positive values, for x.

x					0				
y									

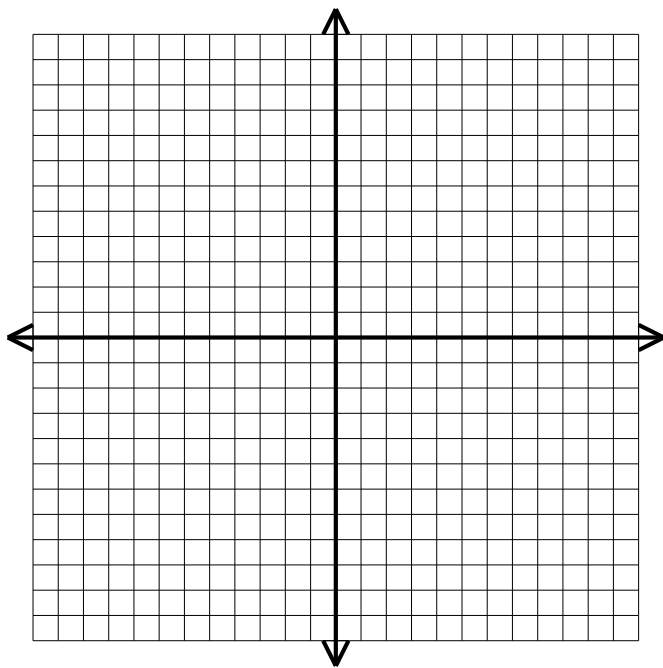
Complete the table below for the function: $y = -x^2$

Use negative values, 0, and positive values, for x.

x					0				
y									

a) Sketch the graphs of both functions below. Use a different color for each if possible.

b) For the graph of $y = x^2$, estimate the x-values corresponding to $y = 8$.



c) For the graph of $y = -x^2$, estimate the x-values corresponding to $y = -3$.

4) If possible, draw a triangle for each part that has exactly the number of lines of symmetry specified. Name the kind of triangle that you drew (look at your Polygon Graphic Organizer)

a) 0

b) 1

c) 2

d) 3