

Written Assignment 1    Name: \_\_\_\_\_  
Math 1730                Class time: 12:00-12:50pm \_\_\_\_\_  
                                 Section: 013 \_\_\_\_\_

10 points

Score:

*Instructions:* Print this sheet to turn in. Non printed copies will not be accepted. Please list the day and time of your recitation in the class time field. **Due:** At the beginning of recitation the week of 8/26/2013.

1. Consider  $f(x) = x^2 + 6x - 3$

(a) ( 2 points ) What is the vertex of  $f(x)$ . List both the  $x$ -value and  $y$ -value.

(b) ( 2 points ) Circle one  $f(x)$  opens:        **upwards**        **downwards**

(c) ( 2 points ) Use the quadratic formula to find all the solutions to the equation  $f(x) = 0$ .

2. ( 2 points ) List all the vertical asymptotes of the function  $g(x) = \frac{x^2 - 4}{x^2 - 5x + 6}$

3. ( 1 point ) Write  $\frac{2}{\sqrt[3]{x^7}}$  using exponents instead of division or radicals.

4. ( 1 point ) Write  $-7x^{5/3}$  using radicals and or division instead of negative or fractional exponents.