Math4010 Problem Set 6

<u>Due date:</u> _____

Please attach the appropriate cover sheet to your assignment when you turn it in. Remember that it must be stapled and also that you cannot turn this in late! **To get full credit, you must have neat work, show all work, and <u>circle or box all answers</u>!!**

(1) (10 points) Without evaluating it, how can you tell if the following expression is positive or negative? (State clearly whether you think this is positive or negative.)

$$\frac{(1)(2)(3)\cdots(49)(50)}{(-2)(-4)(-6)\cdots(-34)}$$

(2) (10 points) Simplify this expression (show all your steps).

$$\frac{-3(2-5)-(-18\div 3x4)\div 2+1-6}{8-(7-9)+1}$$

(3) (10 points) Evaluate this expression when $x = -5$, $y = 2$ and $z = \frac{-1}{4}$.

$$\frac{4y^3 - x^2}{25z^{-2}}$$

(4) (5 points each) Use two different methods to show these calculations.
   (a) $(-24)\div 8$
   (b) $-5 + -2$
   (c) $4 \cdot (-3)$
   (d) $-7 - (-2)$

(5) (10 points) Use a number line to explain and calculate this expression.
   $-5 - (-(-2)) +1 -3 + (-4)$

(6) <u>From the book:</u> (10 points each)

   8.1 B #18, 19, 21
   8.2 B #16, 21, 37
   pg 376 (Problems for Writing/Discussion) #3, 6
   9.1 B #10, 16, 33
   9.2 B #18, 27, 32, 33, 38, 41