Math 220 (section ???) **Quiz 1** **Fall 2010**

Name _____

- No calculators allowed.
- Show sufficient work to justify each answer.
- You have 15 minutes for this quiz.

1. (2 points) Is the following function even, odd or neither?

$$f(x) = \frac{8x^3}{x^4 + 5}$$

2. (2 points) What is the domain of the function $f(x) = \sqrt{3 - \sqrt{x-2}}$?

3. (1 point) Given that $f(x) = x^2 + 1$ and $g(x) = 3x - 2$, evaluate and simplify $(g \circ f)(2)$.

4. (1 point) Evaluate and simplify $\sec(4\pi/3)$.

5. (2 point) Determine real numbers a and b so that the expression $5\tan^2\theta + 2\sec^2\theta$ can be rewritten as $a\sec^2\theta + b$.

6. (2 points) Carefully sketch a graph of the function $f(x) = 5 - 2\cos x$ on the interval $[0, 2\pi]$.