Quiz 5   **Name:** _____

June 24, 2010

Directions: Show all work for full credit. Clearly indicate all answers. Simplify all mathematical expressions completely. Each question is worth 10 points.

1. Rewrite the following expression using only positive exponents, and simplify:

$$\frac{6 x^3 y^{-3}}{12 x^{-2} y}$$

2. Find and simplify the following difference:

$$(6 t^3 - 12) - (-t^3 + t - 2)$$

3. Find the following product:

$$(3 a + 2)(a^2 + 3 a + 1)$$

4. Factor the following expression:

$$36 x^2 - 25 y^2$$