

Math 111 Quiz #8

Name: \_\_\_\_\_

May 27, 2009 Show all work and simplify as much as possible.

- (3 pts.) Find a formula for the **power** function  $g(x) = k \cdot x^p$  whose graph goes through the points  $(1, 4)$  and  $(-2, -32)$ .
- (4 pts.) Find the zeros of  $f(x) = 10x^5 - 5x^4 - 15x^3$ .
- (3 pts.) Match the following equations to its possible graph.

(a)  $4x^6$

(b)  $3x^{1/5}$

(c)  $x^{-2}$

(d)  $-x^7$

(e)  $3x^{1/4}$

(f)  $2x^5$

