

MATH 4E Fall 2012
Quiz 5

Name: _____

Show all work **clearly** and in order, and circle or box your final answers.
You have 20 minutes to take this 5 point quiz.

1. Let a parabola be given by the equation $(x + 4)^2 = 16(y + 2)$.

(a) (2 points) Find the vertex and focus.

(b) (1 point) In which direction does the parabola open?

2. (2 points) Find an equation to an ellipse with one focus at $(-4, 0)$ and vertices $(\pm 5, 0)$.