

Math 160

Quiz 5

Name: _____

July 15, 2003

Show all work for credit.

Leave all answers as exact answers unless otherwise stated.

1. Let $f(x) = \frac{-4}{x}$, simplify $\frac{f(x+h) - f(x)}{h}$

2. Complete the square: $3x^2 - 12x + 5$

3. Let $f(x) = 2x^3 - 3x + 2$. Find the point on the graph that is closest to the point $(-1, 1)$

4. Give the equations for the circle that is centered at $(3, -7)$, and passes through the point $(1, 2)$