Math 134 Spring 2018
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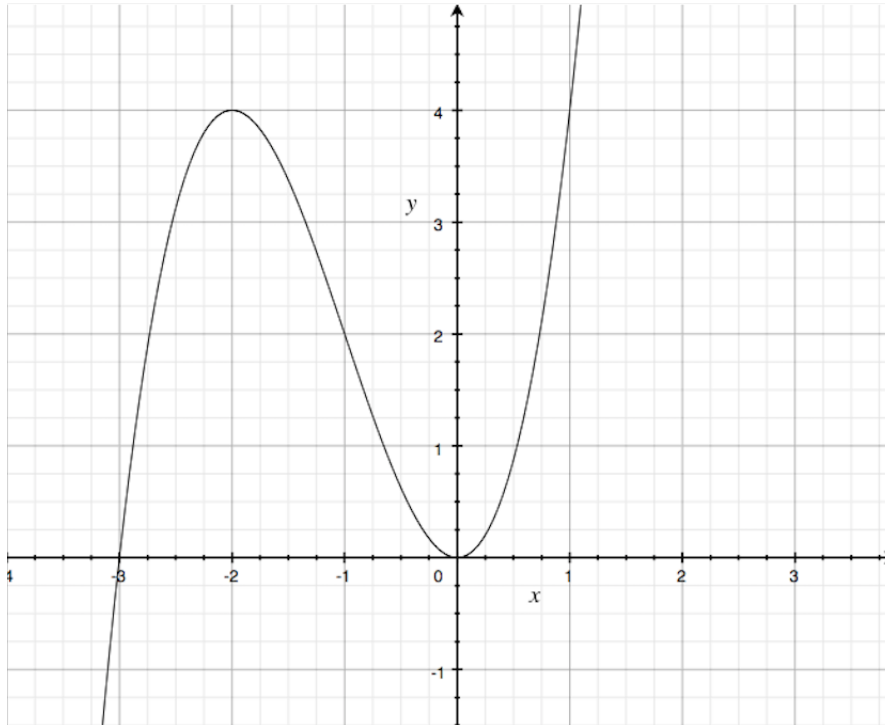Homework Quiz 8   Name: _____

Show all your work and simplify your answers unless otherwise specified. If you do not turn in
a rewrite within a week (or after the fifth attempt), your score will be solidified.

1. Consider the function $f(x) = x^3 + 3x^2$ whose graph is given:

   (a) Find the average rate of change of f from $x = -2$ to $x = -1$. Then write the equation
       of the line passing through the two corresponding points.

   (b) Find the average rate of change of f from $x = -1$ to $x = 1$. Then write the equation
       of the line passing through the two corresponding points.

2. (a) Find the equation of the line passing through the points $(1, -1)$ and $(3, 3)$.

   (b) Find the equation of the line that is perpendicular to the line above and has x-intercept 4.

   (c) Graph both of the lines.