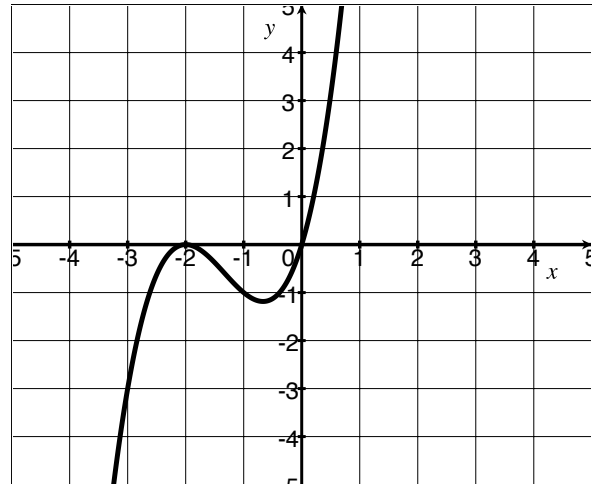# Quiz 3

Show *all* your work. No credit is given without reasonable supporting work. There are *two* sides to this quiz.

1. [3] (Poly Sheet #4) The function f graphed below is a third degree polynomial. Find the equation for the graph.

2. [3] (ExpSheet #3) Solve for x given that $(x-1)^{-1} = \left(\frac{2}{3}\right)^2 x^{-1}$

3. [1] (WebHW7 #18) Write the logarithmic equation below as an exponential equation to solve for x.

$$\log_2(x) = 3$$

4. [3] (§3.1#54) Let g be the exponential graph that has been vertically shifted. Find the equation for the graph.