

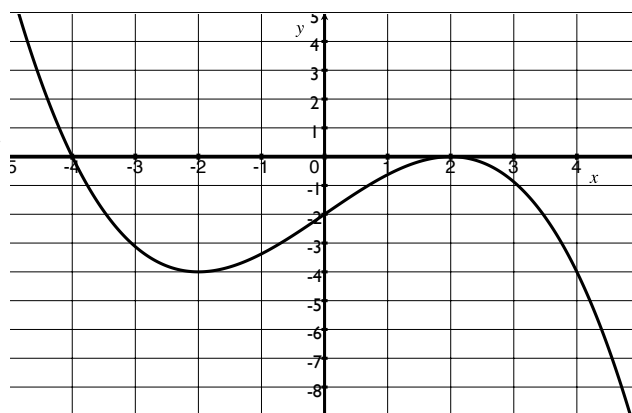
Quiz 3

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

1. Consider the function f graphed to the right.

(a) [1] (WebHW6 #11) True or False:
The leading coefficient of f is positive.

(b) [1] (Polynomial Wks #10)
True or False:
 f could be the graph of a 7th degree polynomial.



(c) [3] (§2.3 #38) Assume when f is completely factored, each real zero c corresponds to a factor of the form $(x - c)^m$. Find the equation of least degree for f .

2. [2] (Exponent Wks page 4#2) Simplify $\frac{a^2b^{-2}}{a^{-1}b}$

3. [3] (WebHW7 #14 & 22) Graph g where: $g(x) = \begin{cases} (\frac{1}{2})^x & \text{if } -2 \leq x \leq 0 \\ \log_3(x-1) & \text{if } 0 < x \leq 4 \end{cases}$

