## Quiz 2

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

1. [2] (polynomial wks \#9) Which of the following could be the graph of a fifth degree polynomial. Circle all that could work and cross out those that could not.



2. [3] (A.2 \#74) Completely factor $2 x^{3}+3 x^{2}-11 x-6$ given that 2 is a root.
3. Let $g$ be the function whose graph is shown to the right.
(a) [1] What is the domain of $g$ ?
(b) $[2](\S 3.2 \# 62)$ Find the function of the form $g(x)=\log _{b}(x)$.

(c) $[2]$ (WebHW7 \#14) Sketch the graph of $3 g(x)-1$
