## Quiz 3

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

1. [2] (Polynomial Wks \#3) Identify all of the following that could be a graph of a degree three polynomial.



2. [1] (WebHW9 \#16) Divide.

$$
\frac{8 x^{3}-9 x^{2}+2 x}{4 x^{2}-3 x+1}
$$

3. [2] $(\S 3.2 \# 48)$ Find $x$ given $\log _{16} \sqrt[4]{x}=\frac{1}{4}$.
4. [3] (log Wks \#3) The graph of $f$ shown below is an exponential function that has been shifted horizontally. Find the algebraic rule for $f$.

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