## Quiz 3

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

1. [1] Write down a function that is not a polynomial.
2. [3] (§2.3 \#38) The graph of a cubic polynomial $f$ is given. Find the equation for $f$.

3. [2] (Polynomial Wks \#7) Identify which (if any) of the following could be the graph of a degree 3 polynomial.



4. [4] (§1.2 \#85) The area of a rectangle is $4 x^{4}-4 x^{3}+9 x^{2}-x+2 \mathrm{~cm}^{2}$ and the width is known to be $x^{2}-x+2 \mathrm{~cm}$. Find the length.
