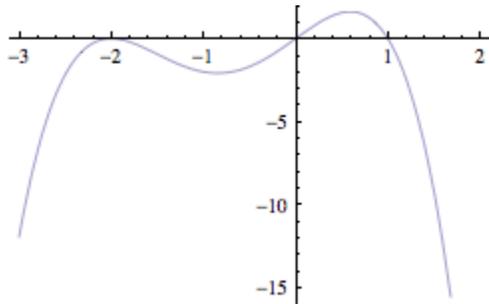


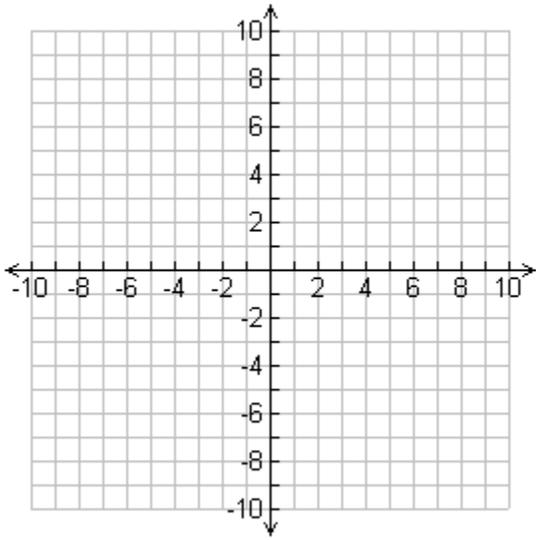
Task 2 (10 pts): Below is the graph of a degree 4 polynomial (all of the zeros are the exact integer values they appear to be). Find the polynomial and write it in standard form. Show your work.



Task 3 (15 pts): The following tasks and questions concern the rational function $R(x) = \frac{x^2-4}{x^2+4x}$

- Find its horizontal asymptote. How do you know just by looking at its algebraic expression?
- Find its vertical asymptotes. Show your work.
- Find all of its intercepts. Show your work.
- Sketch the graph, representing the asymptotes with dotted lines. There is a blank graph on the next page for you to use.

For Task 3:



For Task 1, if desired (if you're using this, indicate where your axes are and what their scale is):

