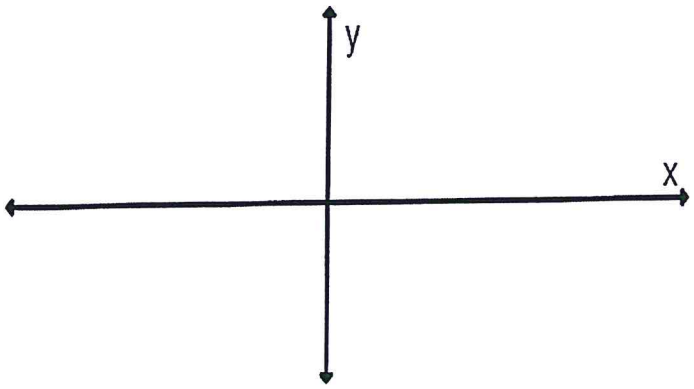
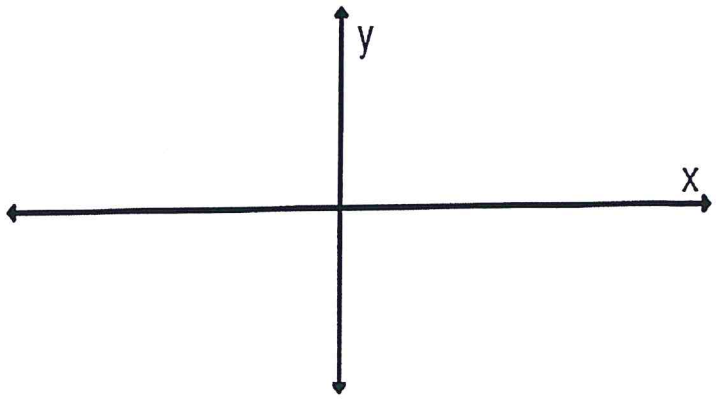
Algebra 2 Hwk #27 Fall 2015 Name:

Sketch the graph of each polynomial showing the end behavior, the zeros, and the behavior around each zero.

1. $y = -x(x+6)^2(x-4)^2$

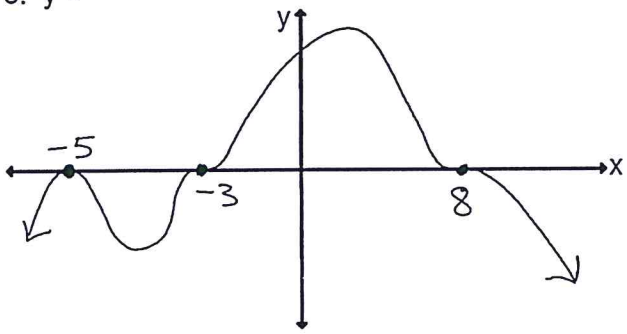


2. $f(x) = (x-5)^2(x+2)^3(x+8)$

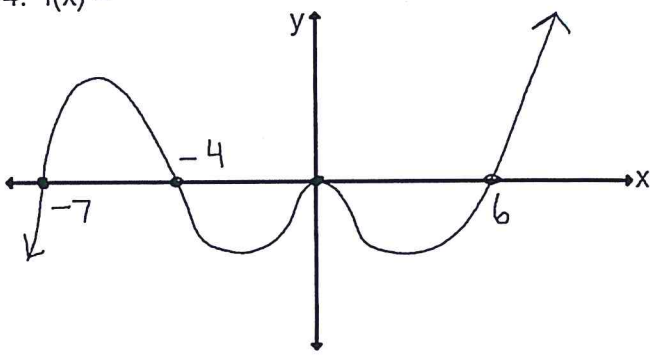


Use the graph of each polynomial to write it's equation.

3. y =



4. f(x) =



5. Write an equation of a polynomial that has the following zeros: $-2, -1, 5$ (all single zeros). Give your answer in Standard Form.

$y =$

6. Write the exact equation of a polynomial that goes through the point $(-1, 112)$ and has the following zeros: 6(single zero) and –3(double zero). Give your answer in Factored Form with the correct value of a.

$y =$