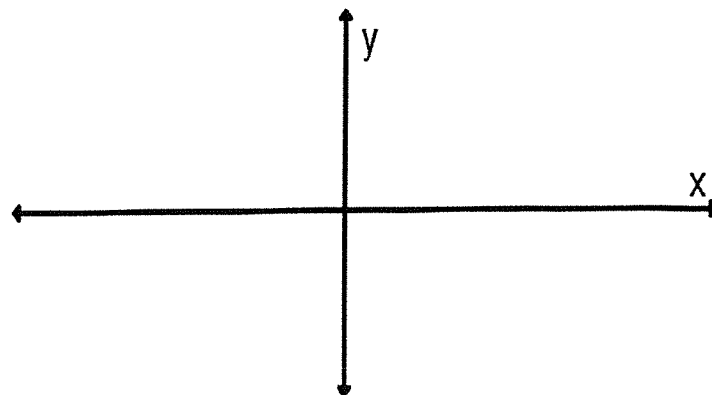
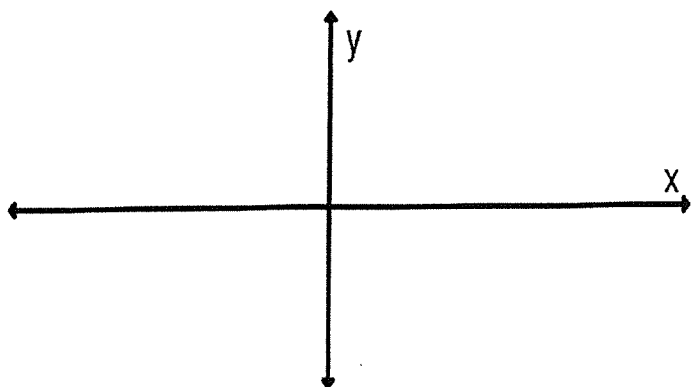


Sketch the graph of each polynomial showing the end behavior, the zeros, and the behavior around each zero.

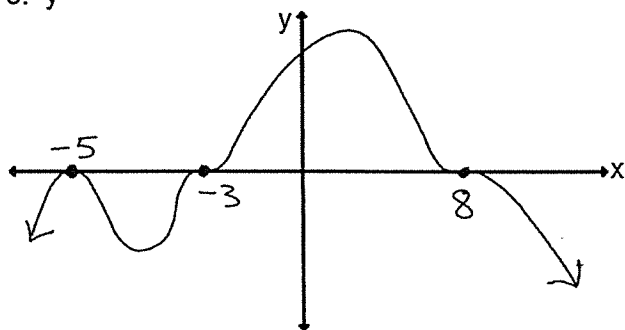
1.  $y = -x(x + 6)^2(x - 4)^2$

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

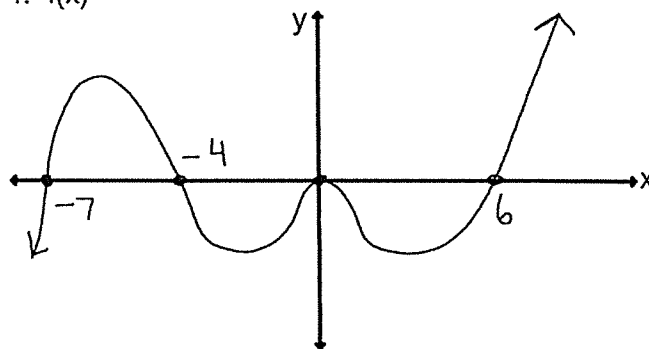


Use the graph of each polynomial to write its equation.

3.  $y =$



4.  $f(x) =$



5. Write a possible 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  $a$ .

$y =$