

Algebra 2

Graphing Polynomials HW #1

Name:

Date:

Period:

Write a polynomial function with the given zeros.

1. 5, -1, 3

2. 2, 3, -1, -3

3. 0, -8, 2

4. -10, 0, 2, 3, -6

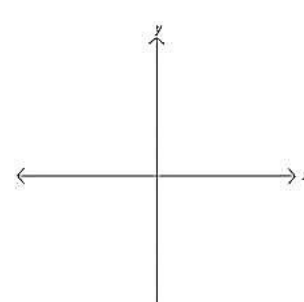
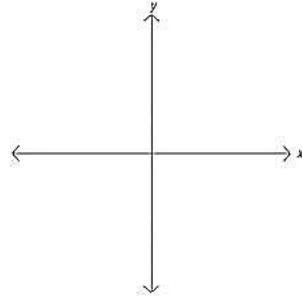
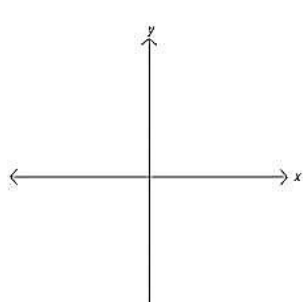
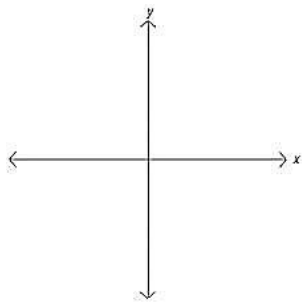
For each polynomial function, find the end behavior, leading coefficient, roots, and sketch the graph.

5. $y = x(x+6)(x-2)$

6. $y = 2x(x+2)(x-10)$

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

8. $y = 3x(x+4)(2x-3)$



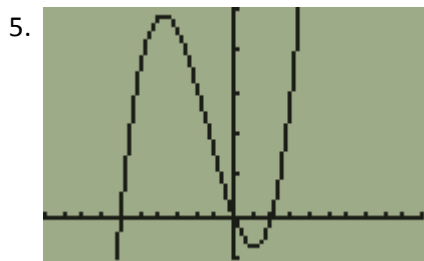
Answers:

1. $y = A(x-5)(x+1)(x-3)$

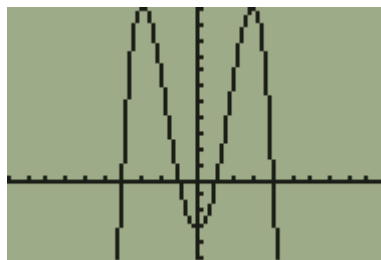
2. $y = A(x-2)(x-3)(x+1)(x+3)$

3. $y = Ax(x+8)(x-2)$

4. $y = Ax(x+10)(x-2)(x-3)(x+6)$



7.



8.

