Secondary Math 3 Name: _____
8-3 Graphing Polynomials Period: _____

Determine the zeros, multiplicity and intersection for each of the following

1. $f(x) = x(x+1)(x+3)$

Zero	Multiplicity	Intersection

2. $f(x) = (x+1)^2(x-1)(x-2)$

Zero	Multiplicity	Intersection

3. $f(x) = -x(x-2)^2$

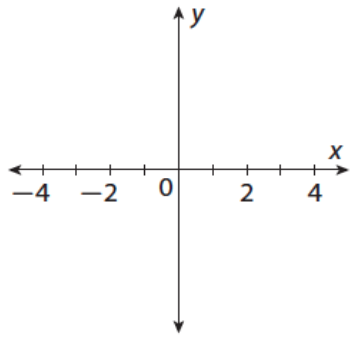
Zero	Multiplicity	Intersection

4. $f(x) = -(x-1)(x+2)^3$

Zero	Multiplicity	Intersection

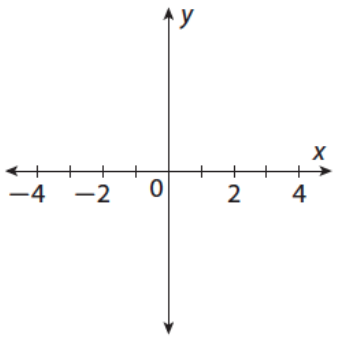
Sketch the graph the polynomial function.

5. $f(x) = x^2(x-2)$



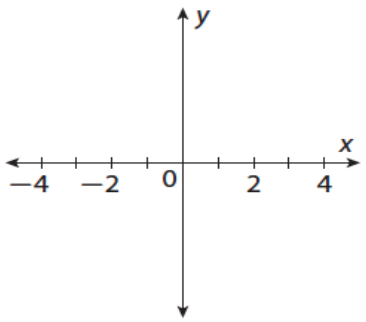
Zero	Multiplicity	Intersection

6. $f(x) = -(x+1)(x-2)(x-3)$



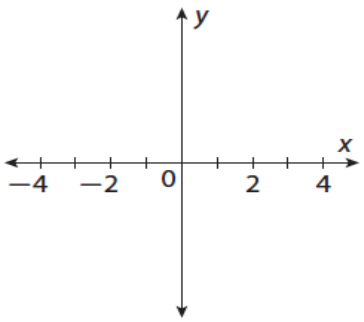
Zero	Multiplicity	Intersection

7. $f(x) = x(x+2)^2(x-1)$



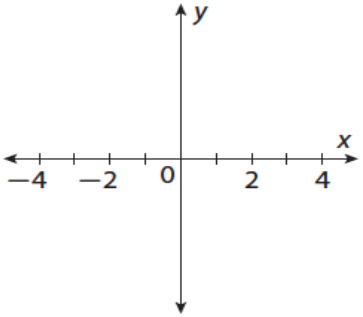
Zero	Multiplicity	Intersection

8. $f(x) = -(x+3)^2(x+1)^3(x-4)$



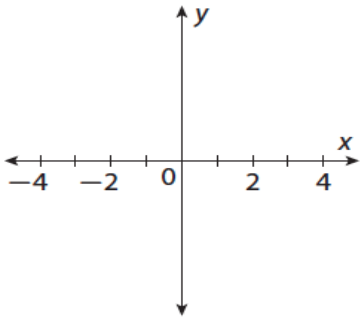
Zero	Multiplicity	Intersection

9. $f(x) = x^3(x+1)(x-2)$



Zero	Multiplicity	Intersection

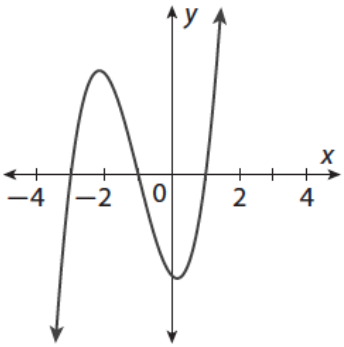
10. $f(x) = x(x-2)(x+5)$



Zero	Multiplicity	Intersection

Write the equation for the given graph.

11.



12.