Graphing polynomials

Name _____

Check for Understanding:

Which of the following polynomials are odd degreed polynomials:

$Y = 5x^4 - 3x^3 + 7$ 　　　　　　$y = 2x^5 - 7x^2 - 3x + 4$ 　　　　　　$y = (x-7)^2(x+1)^2(x+2)$
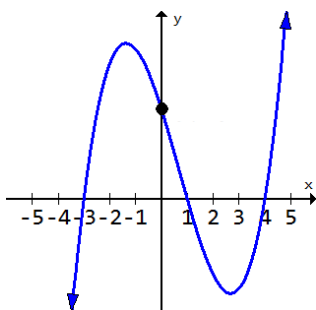
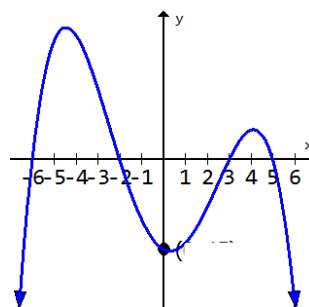$Y = 4x(x-2)^2$ 　　　　　　$y = -3x^2(x+5)(x-7)$ 　　　　　　$y = -6x^5 - 7x^6$
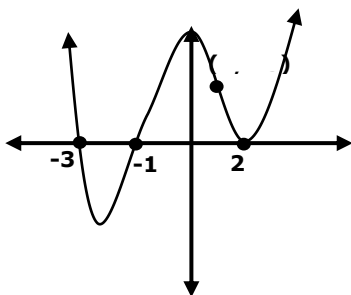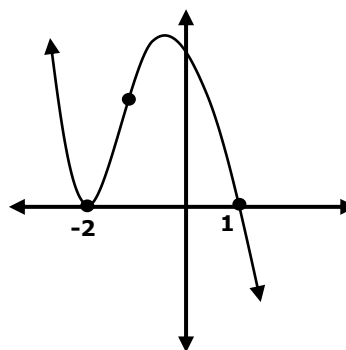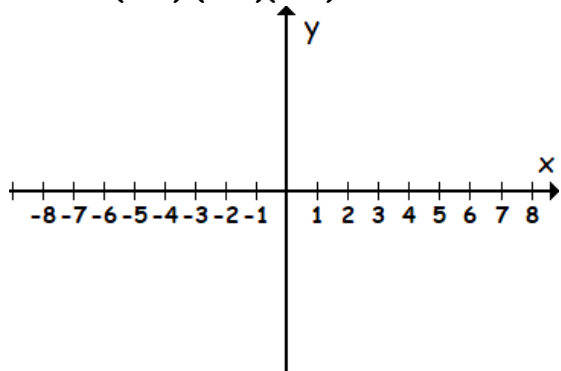
Practice C-Level:
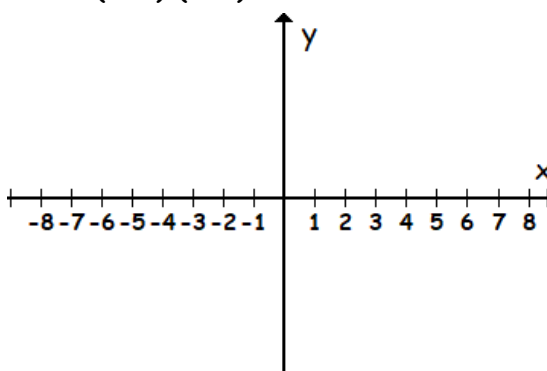
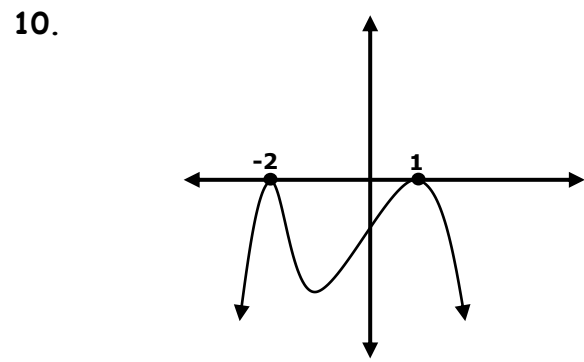Write a possible equation for each polynomial:
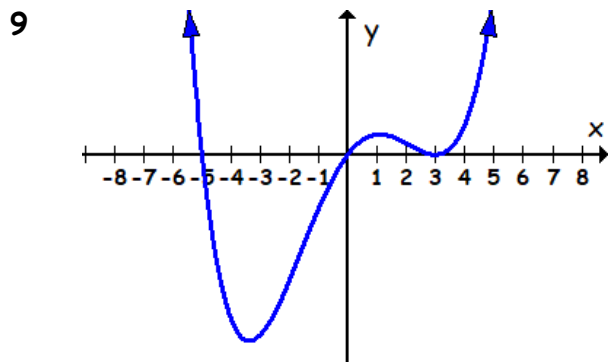
1.

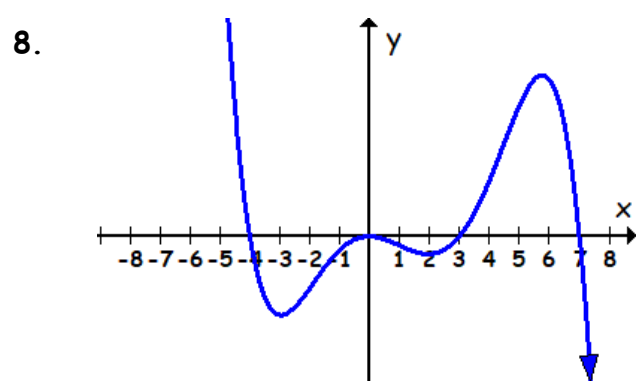2.
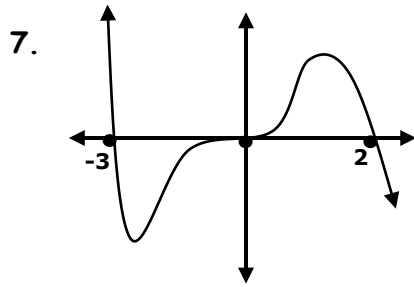

3.

4.

Graph the polynomials:

5. 　$Y = 4(x-3)^2(x+4)(x+6)$

6. $Y = -2(x+5)^2(x-3)^2$

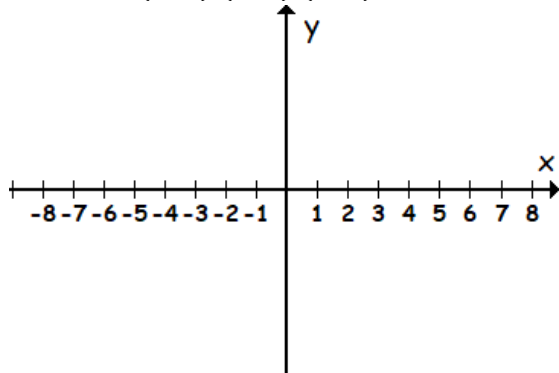**B-Level** -- Write the equation
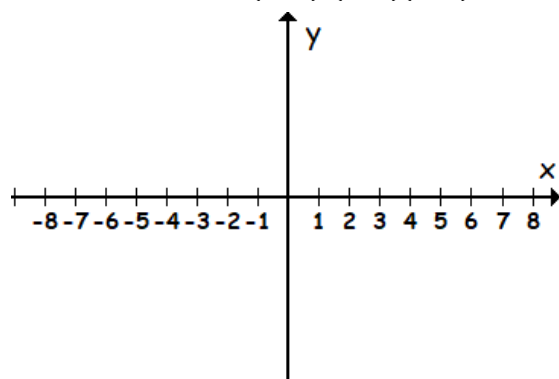
7.

8.

9

10.

Graph the given equation:

11. $Y = 4x(x+3)^2(x-4)^2(x+6)$

12. $Y = -12x^3(x+4)^2(x-3)(x-7)$

Looking ahead: Find the EXACT equation of this polynomial.

(0,12)