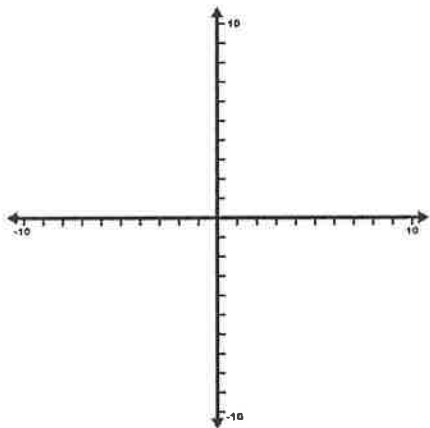


Name: _____ Period: _____ Date: _____

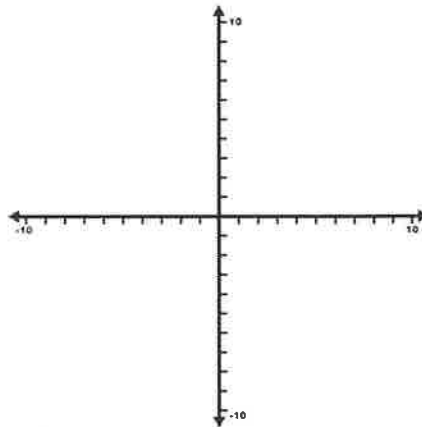
Additional Practice with Sketching and Writing Polynomials

For numbers 1-6, sketch a graph of the given polynomial.

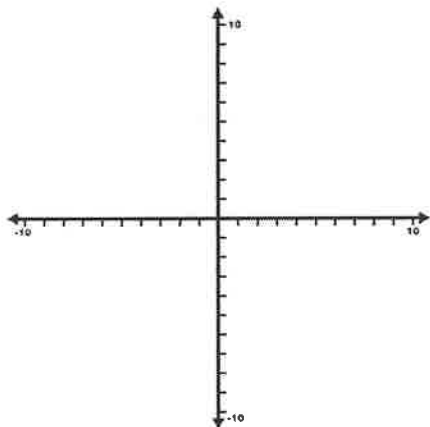
1. $f(x) = -(x + 8)^3(x + 2)^2(x - 5)$



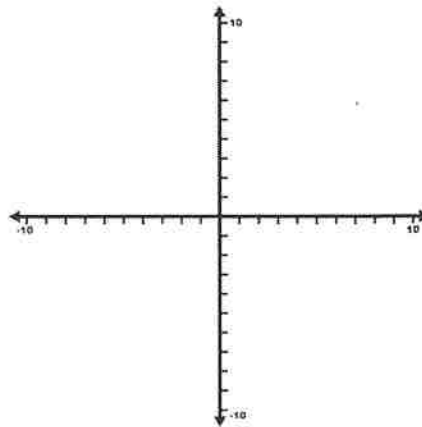
2. $g(x) = 2(x + 6)^2(x - 1)^2(x - 7)$



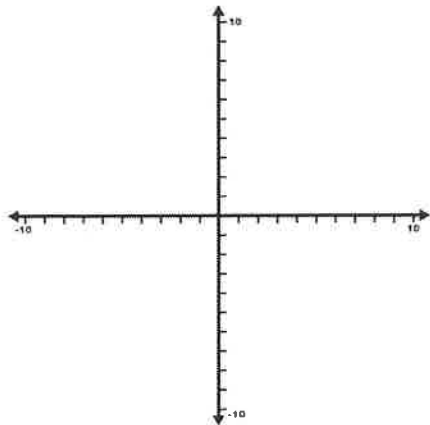
3. $h(x) = \frac{1}{2}(2x + 5)^3(x - 4)^2$



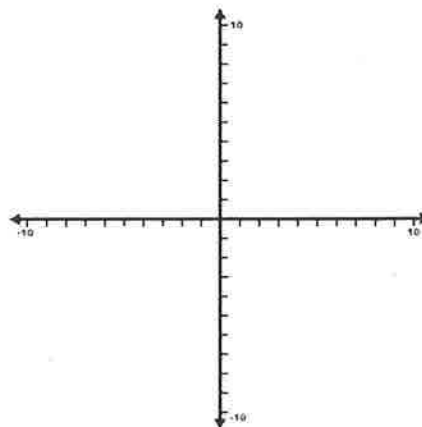
4. $k(x) = -3(x - 8)^3(2x - 7)(x + 3)(x + 7)$



5. $m(x) = -2(x + 2)^2(x - 1)(2x - 11)$

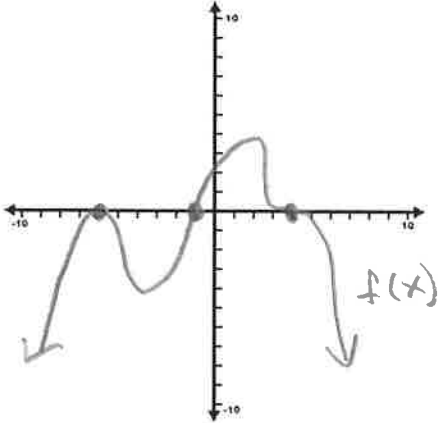


6. $p(x) = (x + 9)^3(x - 4)^3(x + 3)$



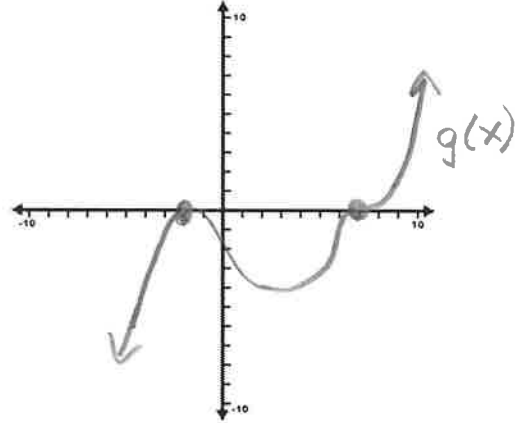
For numbers 7-10, write the polynomial in factored form given the graph.

7.



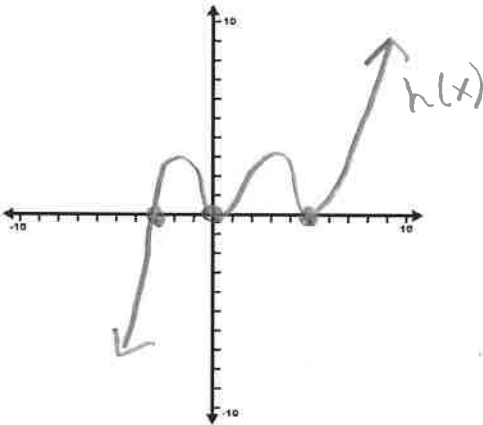
$f(x) = \underline{\hspace{4cm}}$

8.



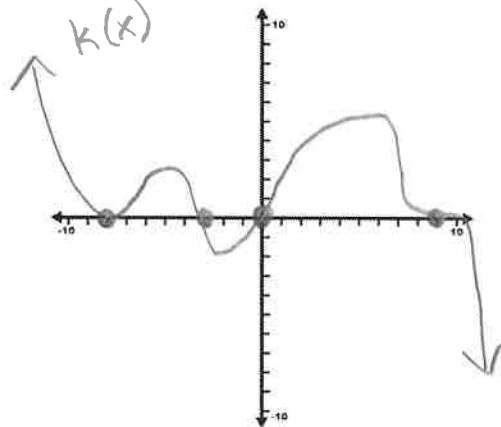
$g(x) = \underline{\hspace{4cm}}$

9.



$h(x) = \underline{\hspace{4cm}}$

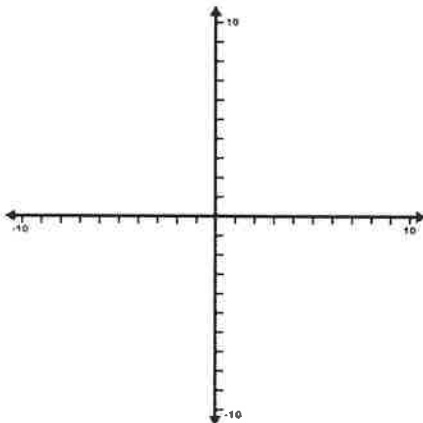
10.



$k(x) = \underline{\hspace{4cm}}$

For numbers 11-12, completely factor the polynomial, then sketch its graph.

11. $m(x) = 2x^3 - 3x^2 - 50x + 75$



12. $p(x) = -x^4 + 64x^2$

