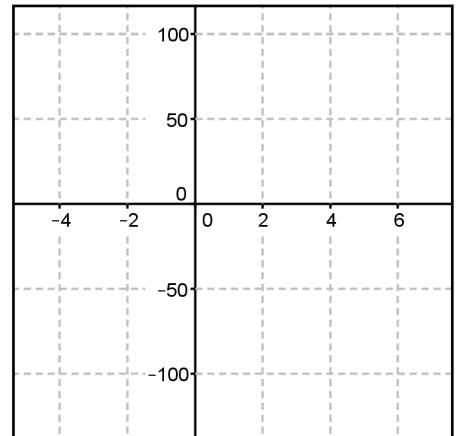


Polynomials 3b – Graphing Polynomials in Factored Form
Homework #7

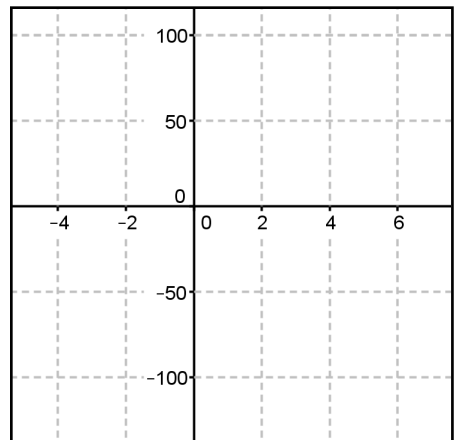
Name _____
Per _____ Date _____

1. Sketch the graph of the following functions. Answer the 3 guiding questions: What is the end behavior? What are the zeros? What is the y -intercept?

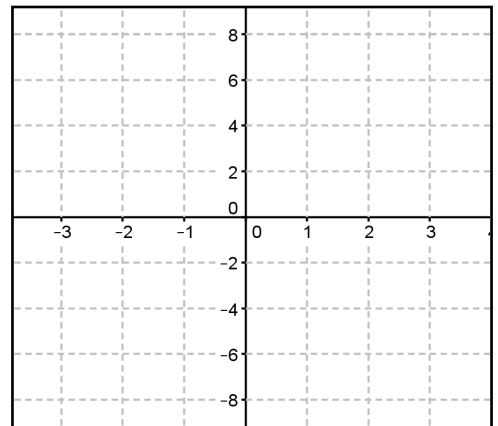
$$A(x) = x(2x + 3)(x - 3)(x - 6)$$



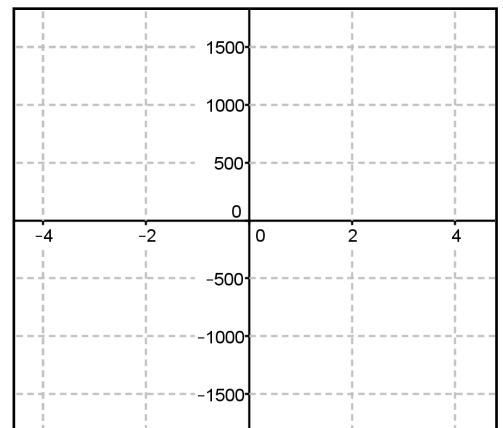
$$B(x) = (x + 4)(x + 1)(x - 2)(x - 4)$$



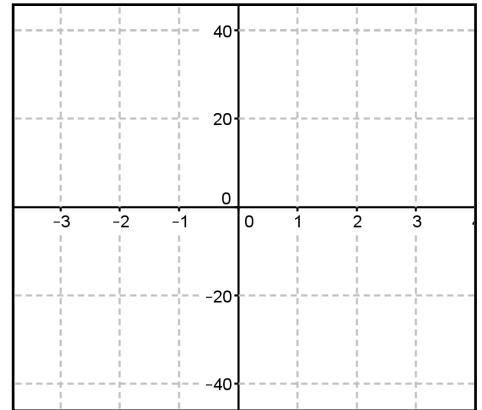
$$C(x) = 5x(x + 1)^2(x + 2)$$



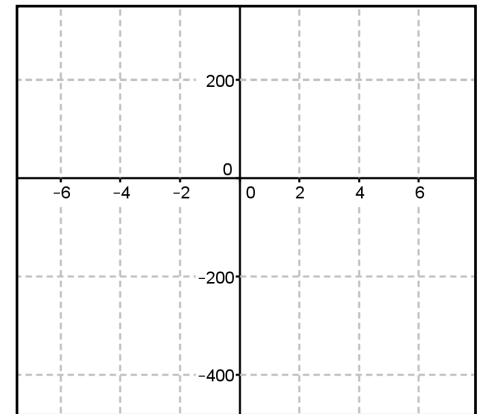
$$D(x) = (x + 5)(x - 3)^3$$



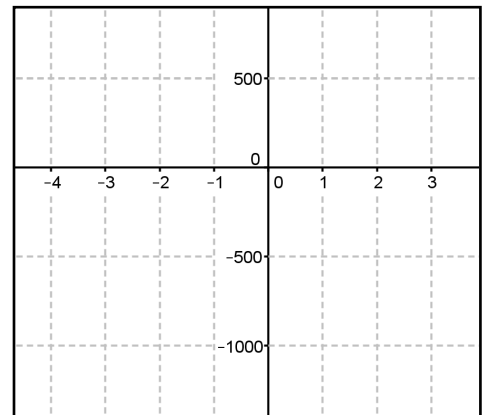
$$E(x) = (x + 2)^2(x - 2)^3$$



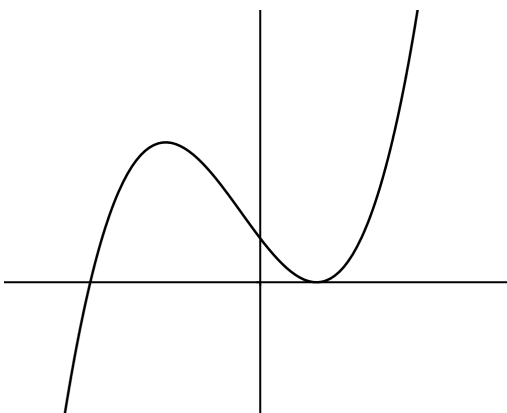
$$F(x) = -2(x + 3)^3(x - 1)(x - 4)^2$$



$$G(x) = x^3(x + 4)^2(x - 3)^2$$



2. Indicate which of the following could be the symbolic representation of the polynomial function graphed below by placing an X in the appropriate box for each row in the table.



Function	Is a Possible Symbolic Representation	Is NOT a Possible Symbolic Representation
$F(x) = (x + 1)^2(x - 3)$		
$F(x) = (x + 5)(x - 2)^2$		
$F(x) = 2(x - 1)^2(x + 5)$		
$F(x) = -3(x + 5)(x - 1)^2$		