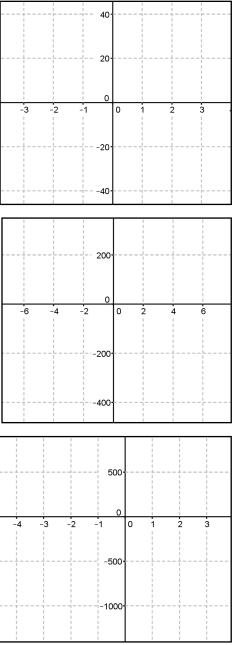
Polynomials 3b – Graphing Polynomials in Factored Form Homework #7

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?

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A(x) = x(2x+3)(x-3)(x-6)									
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B(x) = (x+4)(x+1)(x-2)(x-4)		:							:
D(x) = (x + 4)(x + 1)(x - 2)(x - 4)				- 100	,∔				
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$C(x) = 5x(x+1)^2(x+2)$					8				
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$D(x) = (x+5)(x-3)^3$				150					
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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
$F(x) = (x + 1)^2(x - 3)$		
$F(x) = (x + 5)(x - 2)^2$		
$F(x) = 2(x-1)^2(x+5)$		
$F(x) = -3(x+5)(x-1)^2$		

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

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

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