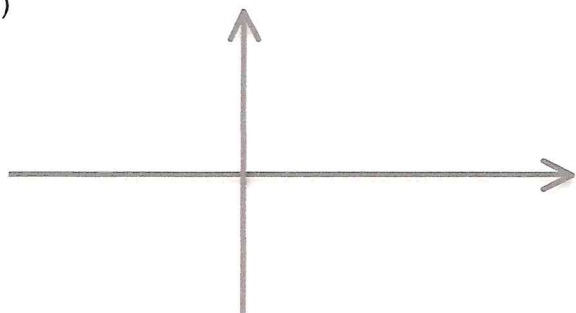


Graphing Polynomial Functions from Factored Form

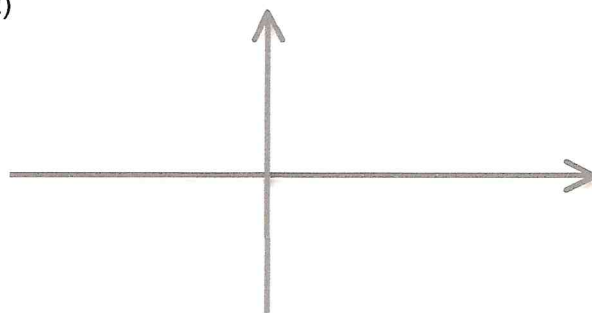
Sketch the graph of each polynomial function.

Function	Positive or Negative	Even or Odd	Zeros	Multiples?
1) $f(x) = (x+1)^2(x-2)(x-3)$				
2) $f(x) = -2(x+3)^3(x-2)^2$				

1)

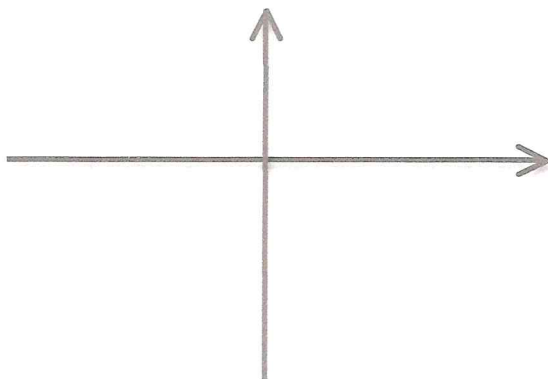


2)

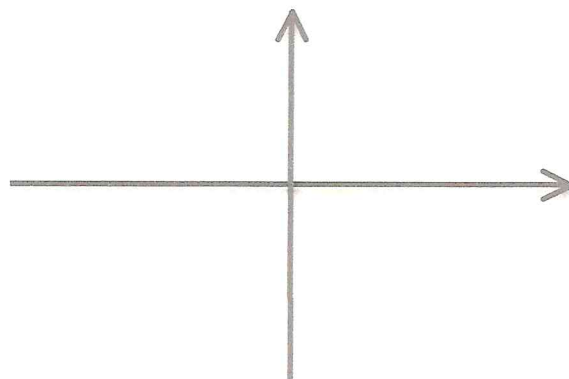


Function	Positive or Negative	Even or Odd	Zeros	Multiples?
3. $f(x) = (x-1)^3(x+4)^2$				
4. $f(x) = x(x+3)(x+1)(x-1)(x-3)$				

3)

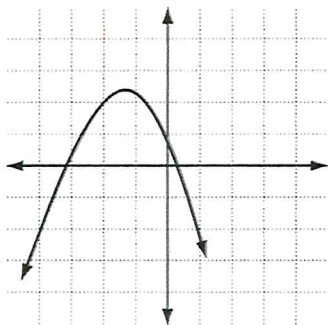


4)

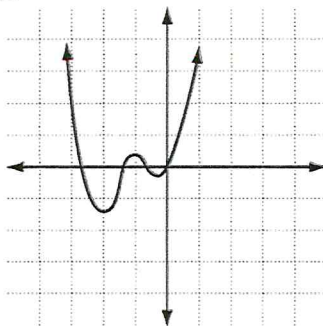


Use the graphs to fill in the table

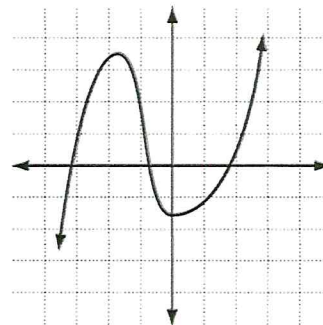
1.



2.



3.

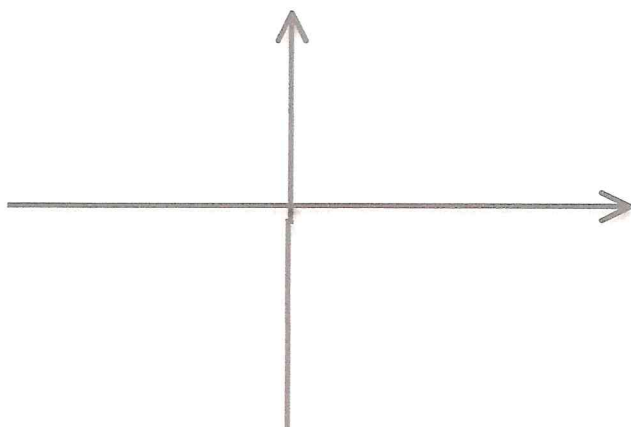


Function	degree (circle one)	Lead coef. (circle one)	End Behavior (Left and Right)	How many x-intercepts?
1.	Odd Even	Positive negative	L: $x \rightarrow -\infty, y \rightarrow -\infty$ R: $x \rightarrow +\infty, y \rightarrow +\infty$	
2.	Odd Even	Positive negative	L: R:	
3.	Odd Even	Positive negative	L: R:	

Fill in the table for each of the following functions, then sketch the graphs.

Function	Positive or Negative	Even or Odd	Zeros	Multiples?
4. $f(x) = x(x-4)^2$				
5. $f(x) = -x^2(x-2)(x+1)$				

4)



5)

