(A) Lesson Context

BIG PICTURE of this UNIT:	• What is a Polynomial and how do they look? • What are the attributes of a Polynomial? • How do I work with Polynomials?		
CONTEXT of this LESSON:	Where we've been We have discussed the basics: degree, type, and operations (+, –, x)	Where we are What are the key attributes of a polynomial and how do these affect the shape?	Where we are heading What are the key attributes of a polynomial and how do these affect the shape?

(B) Lesson Objectives:

a. Begin to analyze the the attributes of a polynomial function and it's effect on the graph.
b. Observations and patterns in the graphs of polynomials.
c. Solidify our perdictions of how polynomials behave.

Connections and Reflections:

1. Please reflect upon and write about any connections between the factored form equation and the graph.	Picture or sketch to support your thinking.
Writen Response:	

2. Please reflect upon and write about any connections between the standard form equation and the graph.	Picture or sketch to support your thinking.
Writen Response:	

3. Please reflect upon and write about any connections between the x-intercpts and the equation.	Picture or sketch to support your thinking.
Writen Response:	

4. Please reflect upon and write about any connections between the y-intercpts and the equation.	Picture or sketch to support your thinking.
Writen Response:	

5. Please reflect upon and write about any connections between the degree of the polynomial and the shape of the graph.	Picture or sketch to support your thinking.
Writen Response:	

6. Please reflect upon and write about any connections between the sign of the leading coefficient and the end behaviour of the graph.	Picture or sketch to support your thinking.
Writen Response:	

Final Consolidaiton

Degree and family name	1st Degree Name:	2nd Degree Name:	3rd Degree Name:	4th Degree Name:	5th Degree Name:
	Graph Shape	Graph Shape	Graph Shape	Graph Shape	Graph Shape
+ Leading Coefficient					
- Leading Coefficient					

EXT 1. Given the following factored form equation…without technology…put into standard form and draw a sketch of the graph.

$$f(x) = (x-1)(x-7)(x+2)$$

EXT 2. Given the following Graph… write a possible factored form equaiton or standard form equation.