

Polynomial Graphing Project Information Sheet

- ❑ You will be assigned a polynomial and you will be required to graph it neatly and accurately on a sheet of graph paper.
- ❑ Put the polynomial number and the function at the top of the paper.
- ❑ Indicate the scale on your graph and label all intercepts and extrema (turning points) by ordered pair.
- ❑ You must also complete the worksheet on the back of this page.
- ❑ Be creative and turn your graph into some type of recognizable object(s) or scenery. Be sure the graph itself can still be easily seen. You may use markers or colored pencils to improve the project appearance.
- ❑ The rubric shown below will be used to determine the grade.
- ❑ You may use a graphing calculator.
- ❑ This project will be counted as a test grade.
- ❑ This project will be due on **Friday, December 11.**

Name: _____ Period: _____

Category	Points Possible	Points Earned	Comments
Worksheet – all answers are correct	40		
Graph – all intercepts and extrema are correctly labeled	10		
Graph – axes are labeled and scale is indicated	10		
Graph – function and # are clearly shown	5		
Drawing – drawing is well designed, neat and attractive, using color to enhance the final product	20		
Timeliness – project is completed and turned in on time.	5		
Names & class period on project	10		
Total	100		

Names: _____ Period: _____

Number of your polynomial: _____ $f(x) =$ _____

Give all of the following information for your polynomial (round all numbers to 2 decimal places):

Classify by degree _____ and number of terms _____

List all possible rational roots of the function: _____

Domain: _____

Range: _____

y-intercept: _____

x-intercept(s): _____

Zeros: _____

Relative Minimum(s): _____

Relative Maximum(s): _____

Absolute Minimum: _____

Absolute Maximum: _____

Interval(s) of Increase: _____

Interval(s) of Decrease: _____

End Behavior: _____

Number and Nature of Roots: _____

Polynomial Completely Factored: _____

Roots: _____