

Essential Question: What do I know about a function?

For your portfolio assignment, you are to graph 4 functions (listed below and on Graphic Organizer—G.O.), write one Graph Investigation question for EACH graph and answer the question (statement). Each question should be **different**, for a total of 4 questions asked. Your final draft should include all the elements from your G.O. and rough draft: table, equation, graph, question, statement and anything else you want to add (you can include your work, but this can also simply be on your rough draft).

After you complete the Graphic Organizer, you are presenting your work as a Tri-fold brochure. You are to create a neat and near perfect **Rough Draft** of the brochure in pencil on plain white paper. Graphs should be precise, axes labeled, scaled precisely and correctly, straight, numbered and you are writing things in the way you mean for them to look on your final.

We will check your Rough Draft, and once that is complete, you will redo/copy your Rough Draft onto a new and actual **FINAL Draft** written in pen, with graphics and creative elements. Both will need to be submitted for credit. You cannot just write over your Rough Draft. No smudges, misspellings or mistakes on the **FINAL Draft**. Final drafts **must be drawn, not computer generated**. Creative elements will help to enhance your brochure.

It is expected that you are taking your time and planning ahead. Effort is expected, and I am giving you the time to do it right—so please take the time to do so. A hastily drawn Rough or Final draft will be accepted for 50% credit, and then you will be asked to resubmit it. Any drafts submitted on lined or graph paper will be accepted for 50% credit, and then you will be asked to resubmit it. Please do it right the first time.

Graph investigation questions can be found on your Graph Investigation Questions Learning Log from chapter 1 (How can I describe a graph?) and can also be found in your text in Chapter 1.

Your graphs and brochure should look professional and creative and be something you are proud to share!

Functions to graph:

$$y = x^2 + 2$$

$$y = \sqrt{x} + 2$$

$$y = \sqrt[3]{x} + 2$$

$$y = |x| + 2$$

DUE DATES:

Graphic Organizer and Rough Draft Brochure are due Monday, October 29th (or whatever day you see me during conference week.) Please refer to conference schedule for exact date.

Final Drafts due Tuesday, November 6th (A/Odd Day) and Wednesday, November 7th (B/Even Day)