

MHF4U - Graphical Assignment (worth 6% total, K – 30%, A – 30%, T – 20%, C – 20%)

You are handing in 3 things before the end of the term:

1. Draft (to be done by hand on an 8.5 x 11 in. graph paper) (Due date:)*Not required for remote learning
2. Picture (Desmos.com link to your saved picture, see below for more details) (Due date: Wednesday, June 30, 2021)
3. Reflection about the assignment upon completion (see below for more details) (Due date: Wednesday, June 30, 2021)

Here are the following guidelines:

- You must submit a **draft** of your picture.
 - Must sketch all your functions in pencil
 - Must label each TYPE of function
 - Approximate the restricted domain/range using INTERVAL NOTATION WITH INEQUALITY SIGNS
- Your **picture**:
 - Go to [Desmos.com/calculator](https://www.desmos.com/calculator)
 - Click create account and input your e-mail, with a username and password
 - You can save your working graph with a title and always go back in at any time to edit
 - Must include at least 20 functions in total
 - Each function must appear at least twice in your picture (for example: at least 2 quadratics)
 - Use colors, different types of lines, be creative
- You must submit a **reflection** upon completion.
 - Typed, 12 times new roman, double spaced, 500 word min.
 - Things to touch upon (reflection criteria)
 - What changes you would make and how improving your draft (the next time) could make it easier
 - What challenges you faced when performing the project
 - What you learned about functions
 - How you will use this tool in the future

Area	Excellent (5 points)	Above Average (4 points)	Average (3 points)	Needs Work (2 points)
Draft* Not required for remote learning	Student clearly shows all the functions they will use with a relative idea of the restricted domains/ranges	Student shows all the functions and labels all types of functions but does NOT correctly label the restricted domain/range	Student labels all functions and labels all types but does not make an attempt to identify the restricted domain/range for each	Student does not label any of their functions they will use or the types. No attempt at labeling domain/range.
Functions	Student used at least 20 functions; Each type of function is used at least 2 times. Student includes at least 1 inequality	Student uses at least 15 functions; uses at least 3 of each type of function	Student uses at least 15 functions; uses at least 2 of each type	Student uses less than 15 functions and/or they do not use at least 2 of each type of function
Creativity	Student uses at least 5 colors, 3 different types of lines and shading in their picture	Student uses at least 3 colors and 3 different types of lines	Student uses either at least 3 colors or at least 3 types of lines	Student uses less than three colors and less than 3 styles of lines
Reflection	Student deeply reflects on how their draft could have made it easier, what challenges they faced, what they learned about functions and how they will use this tool in the future; exceed 500 word minimum	Student reflects on all areas mentioned before and makes insightful reflections but may not go in depth or reflect deeply and barely meets the 500 word minimum	Student only writes the minimum word count and reflects shallowly OR student reflects deeply but misses 1 or 2 of the reflection criteria	Student considerably does not meet the word limit, only reflects on 1 or 2 parts of the reflection criteria, shows shallow thinking

Total _____/20 points