Fun with Linear Functions on Desmos

Teacher: Linda Mindt	Course: Algebra 1
Target: I can graph, interpret, and write linear functions in Slope-Intercept Form with given domains to create shapes and/or letters.	This is a fun and engaging lesson that would be used at the end of the Linear Functions Unit to show mastery of positive and negative slopes, y-intercepts, and use of domains to define length of lines

	Directions	Materials
Engage	Students will explore the Desmos site *"the letter A needs some work"* and manipulate the domains of the given lines to create the letter A.	Chrome book Student Desmos
Explore	Students will then be asked to create the capital letter K, M, or Y by exploring and creating desired equations and providing domains that meet the specifications of the letter. The size and placement of the letter on the coordinate grid would be up to the student.	Chrome book Student Desmos
Explain	This is a fun and engaging way for students to apply what they have learned about positive and negative slopes, y-intercepts, and domain to create a desired image. No restrictions have been applied to this activity so students are able to create their own image with desired steepness of lines, size and placement on the coordinate graph.	
Extend	Students can attempt more difficult letters or try to make a simple image like a happy face	
Evaluate	Students will take a screenshot of their equations and image and will submit it to teacher.	