NOTE CATCHER

Desmos: Marbleslides

Complete the table below as you progress through the Desmos activity.

	Circle What You Changed.	How Did That Change the Graph?
screen 2	$y = \dfrac{1}{x-1} - 2$	
screen 4	$y = \dfrac{4}{x-1} - 2$	
screen 5	$y = \dfrac{-1}{(x-4)^2} + 2\{x < 9\}$	

Why does the graph on screen 5 look so different?

How does the graph on screen 5 look different? Describe the graph.

	Circle What You Changed.	How Did That Change the Graph?
screen 6	$y = \dfrac{4}{x}$	
screen 7	$y = \dfrac{-4}{x+1} - 2$	

Use the tables above to make predictions on screens 8–15.

And So

Describe how a, h, and k of $y = \dfrac{a}{x-h} + k$ each affect the parent graph $y = \dfrac{1}{x}$.