



Discourse in a Virtual Setting

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Facilitating Meaningful Mathematical Discourse

“Effective teaching of mathematics facilitates discourse among students to build shared understanding of mathematical ideas by analyzing and comparing student approaches and arguments (NCTM, 2014 p.29).”



Desmos - Marbleslides: Rationals

<https://teacher.desmos.com/search?q=Marbleslides>

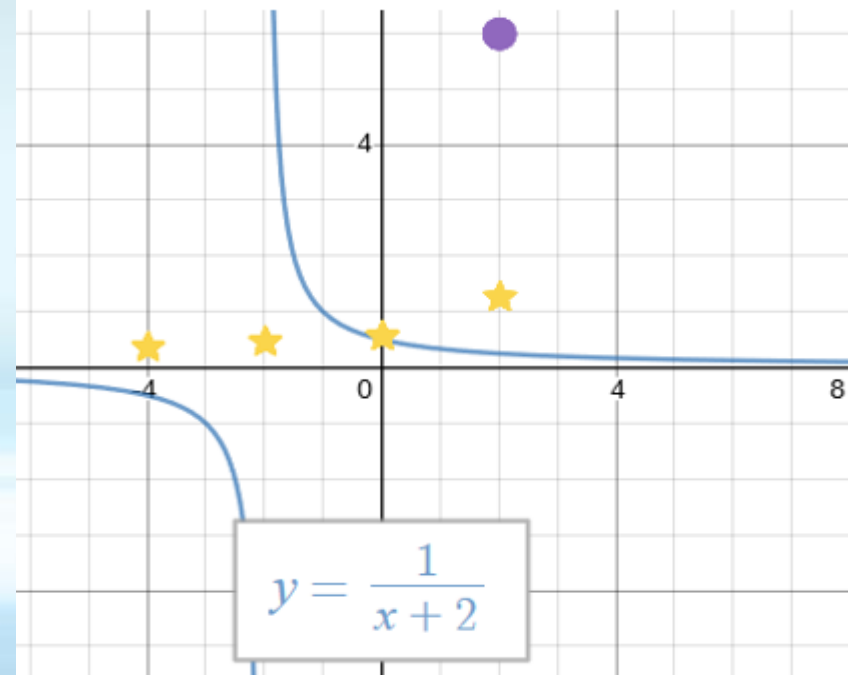
Predict #4

Your friend won't get many stars like this! What changes would you make to the equation to help your friend collect all the stars? Why are those changes going to work?



Share with Class

$$y = \frac{1}{x+2}$$



Henri Lebesgue



Put a negative sign in front and change 2 to -3 because it will flip the graph and slide it far enough to the right.

Diego Rodríguez



you could throw a negative sign in front of the whole equation so it flips and change the -2 to a -3

Pythagoras



Add a negative in front of the equation and change the 2 to a -3

Shigefumi Mori



first I would reflect it over the y-axis, then I would shift the graph to the right

Charles Hermite



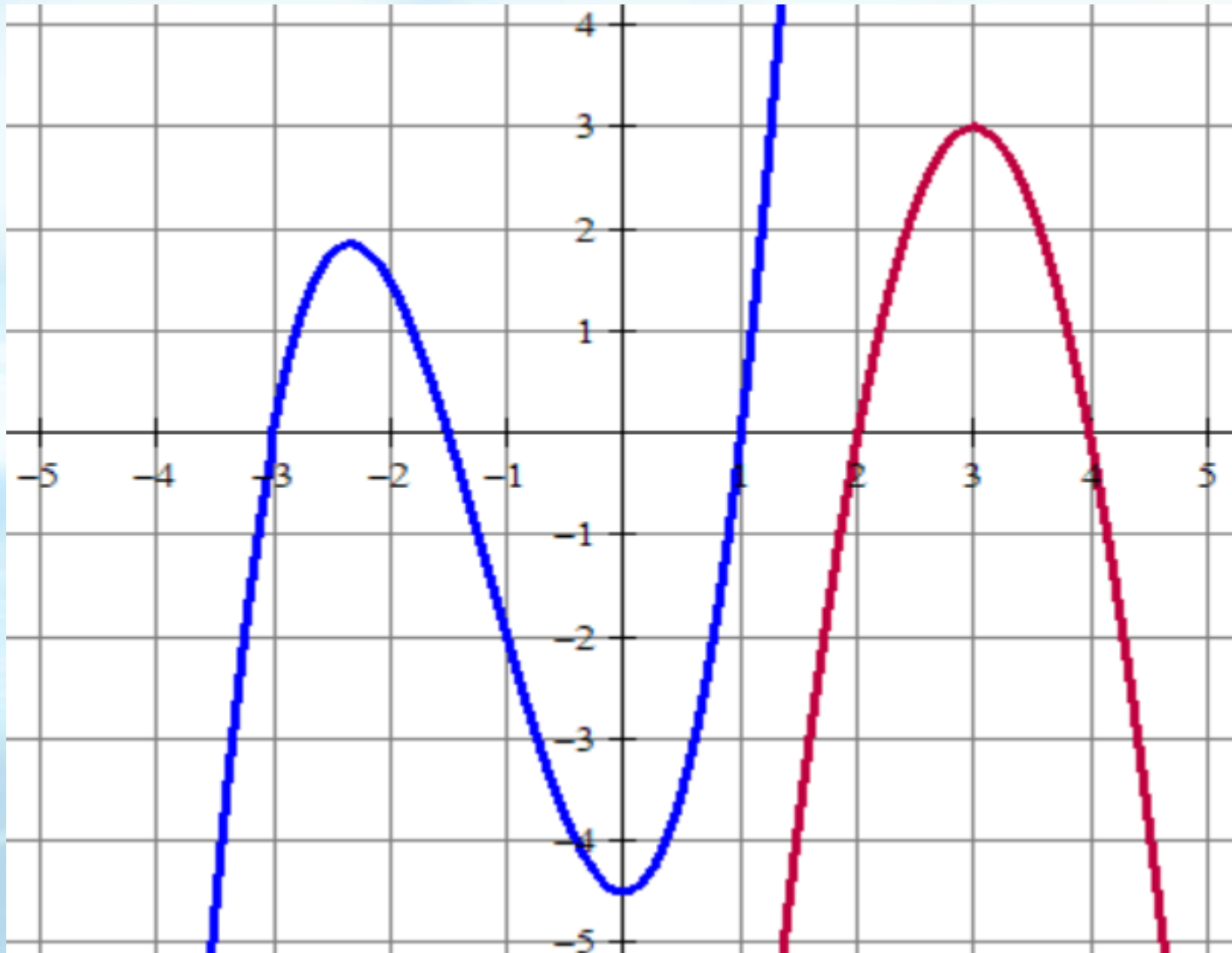
$y = -(1/(x-3))$

Shing-Tung Yau



I would make the equation negative then change the $x+2$ on the bottom to $x-3$

Google Docs





What are your observations of each graph?

Function #1 Red curve	Function #2 Blue curve

Create a statement about what makes these two polynomials similar.

What are major differences for each graph?

Using what you know about polynomials, write an equation that would represent each function.

Function #1 Red curve

Function #2 Blue Curve

Seesaw

<https://web.seesaw.me/>

**We are learning to
identify shapes by
their attributes.**

