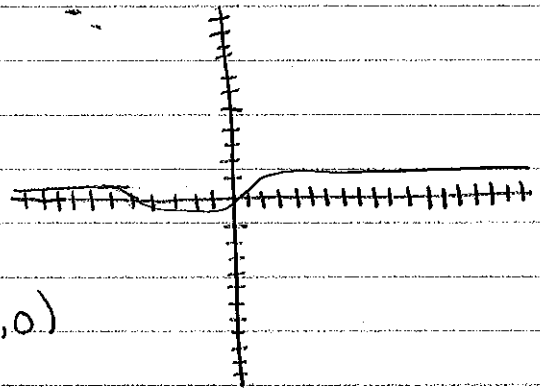
JN

Prepared Post

Ashlynn Henning ♥ 8.3 pg. 531

Find the domain, points of discontinuity, and x- and y-intercepts of each rational function. Determine whether the discontinuities are removable or non-removable.

14. $y = \frac{x^2+2x}{x^2+2}$



D: $\mathbb{R}$

POD: 0

x-inter: (0,0); (-2,0)

y-inter: (0,0)

1. first I put my problem into my calculator. I put x^2+2x in parentheses like this (x^2+2x) I then put a divided by symbol in between the bottom part of my problem, Like this $(x^2+2x) \div (x^2+2)$.

2. Then I hit graph. I sketch the graph on my paper, then proceeded to find my Points of discontinuity. Since my problem doesn't have any points that means my Domain is everything or anything.

3. While looking at my graph I knew I needed to find my x- and y- intercepts. I hit the buttons 2nd Trace and went to the option Zero. I proceeded to go to my first line, second line, and I guessed. I got (0,0) for x-intercept but I also noticed it dipped what looked to be -2. I 2nd traced again went left to -2 and went to my first line, second line, guessed and got (-2,0). Since my first coordinates were (0,0) for x then I traced to zero and got my y-intercept which was (0,0).