Class Discussion

Unit 1 Topic 3 Part 1 Graph of a function

Discussion of an absolute value function:

(1) the operational definition of $|a|$, $a \in \mathbb{R}$?

$$|a| = \begin{cases} a, & a \geq 0 \\ -a, & a < 0 \end{cases}$$

Give demonstration of

$|2x|$ =

$|x-4| =$

Then discuss what is

$f(x) = |x-3|$

Or

$f(x) = -|2x+3|$

Ex 1: Graph $f(x) = |x-2| - |x+3|$

Ex 2: Graph $f(x) = |2x-1| + |x+4| - |3x+7|$