WARM-UP: Graph each of the following...

$$y = -\frac{8}{3}x - 3$$

1) $y \leq -\dfrac{8}{3}x - 3$

$$\frac{5y}{5} = \frac{-2x}{5} + \frac{20}{5}$$

2) $2x + 5y - 20 > 0$

$$y = -\frac{2}{5}x + 4$$

$m = -\frac{8}{3}$ vs $m = \frac{8}{-3}$
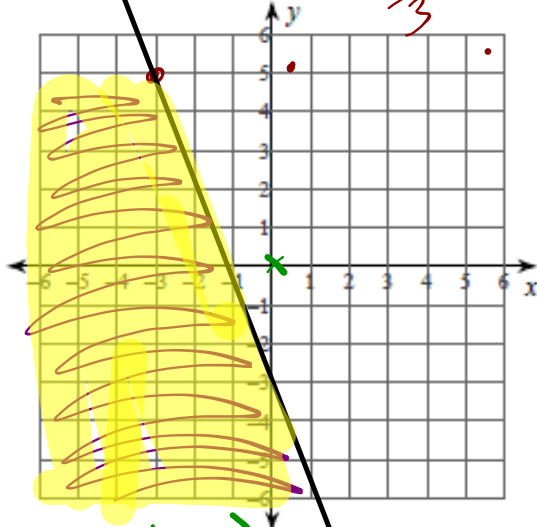
Test $(0,0)$

CS $\leq$ RS

$$\dfrac{0}{} \bigg| \dfrac{-\frac{8}{3}(0) - 3}{}$$

≤ -3 Not a solution.

CS $>$ RS

$2(0) + 5(0) - 20 \overset{?}{>} 0$
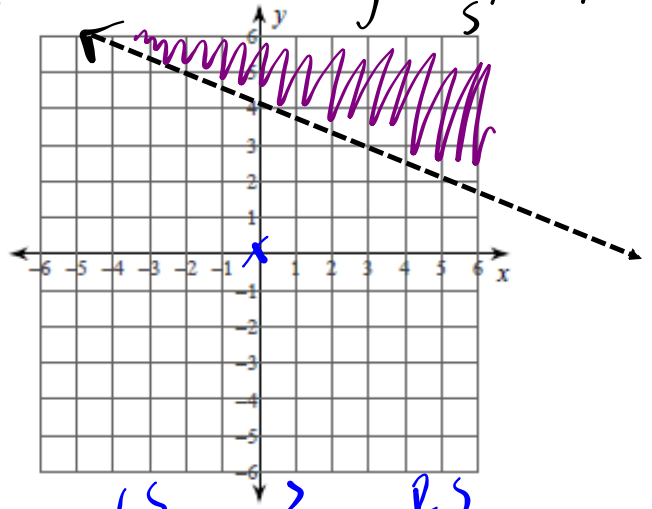
$-20 \overset{?}{>} 0$ NO

Hw Questions

Hamburger → MEET PATTY

Pigs → THEIR FATHER WAS A BOAR

$$\frac{LS}{2(0-0)} \overset{\geq}{\not=} \overset{RS}{5} \quad NO$$
$$\frac{}{0}$$

⑩ $2(x - y) \geq 5$

↑ solid boundary
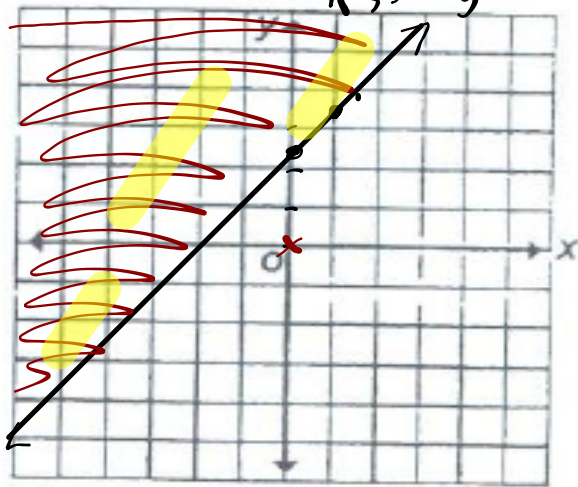
$$2(x - y) = 5$$
$$2x - 2y = 5$$
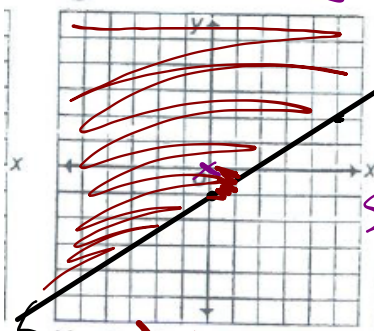$$\frac{-2y}{-2} = \frac{-2x}{-2} + \frac{5}{-2}$$
$$y = x - 2.5$$

Y   All four quadrants; ~~excludes boundary line.~~

U   Quadrants II, III, IV; ~~includes boundary line.~~

Ⓐ   Quadrants I, III, IV; includes boundary line.

(11) $5y - 2 \geqslant 3x - 7$ → Test $(0, 0)$

$LS \geqslant RS$

$\dfrac{5(0) - 2 \mid 3(0) - 7}{-2 \not\geqslant -7}$

yes

N   Quadrants I, III, IV;
    excludes boundary line.

B   All four quadrants;
    includes boundary line.

D   Quadrants I, II, IV;
    includes boundary line.

$5y - 2 = 3x - 7$

$5y = 3x - 7 + 2$

$\dfrac{5y}{5} = \dfrac{3x}{5} - \dfrac{5}{5}$
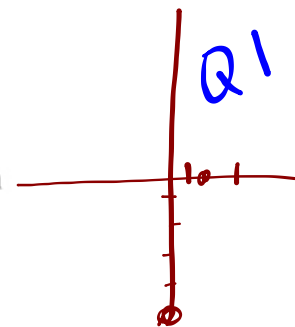
$y = \dfrac{3}{5}x - 1$

WARM-UP: Let's Review...
PRIOR KNOWLEDGE???

WORDS You Need to Communicate Effectively Warm Up - Prior Knowledge for Coordinate Geometry.docx
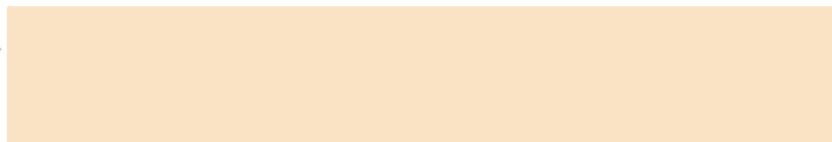
1. Match each term with the best example or description on the right.

a) linear equation

b) x- and y-intercepts

c) slope

d) linear inequality

e) dependent variable

f) domain

g) range

h) discrete

i) continuous

j) independent variable

k) quadrant I

i) C the value 3 in the equation $y = 3x + 1$

ii) $\{1, 2, 3\}$ in the solution set $\{(1, 5),$ $(2, 6), (3, 7)\}$

iii) in a relationship, the variable graphed on the y-axis

iv) a $2y = 3x + 7$

v) d $3 \leq x + 5$

vi) term used to describe a solution set from the set of real numbers

vii) b $\left(\frac{5}{4}, 0\right)$ and $(0, -5)$ for the graph of $y = 4x - 5$

viii) $\{5, 6, 7\}$ in the solution set $\{(1, 5),$ $(2, 6), (3, 7)\}$

ix) in a relationship, the variable graphed on the x-axis

x) term used to describe a solution set from the set of integers

xi) K the part of the coordinate plane where $x > 0$ and $y > 0$

Answers
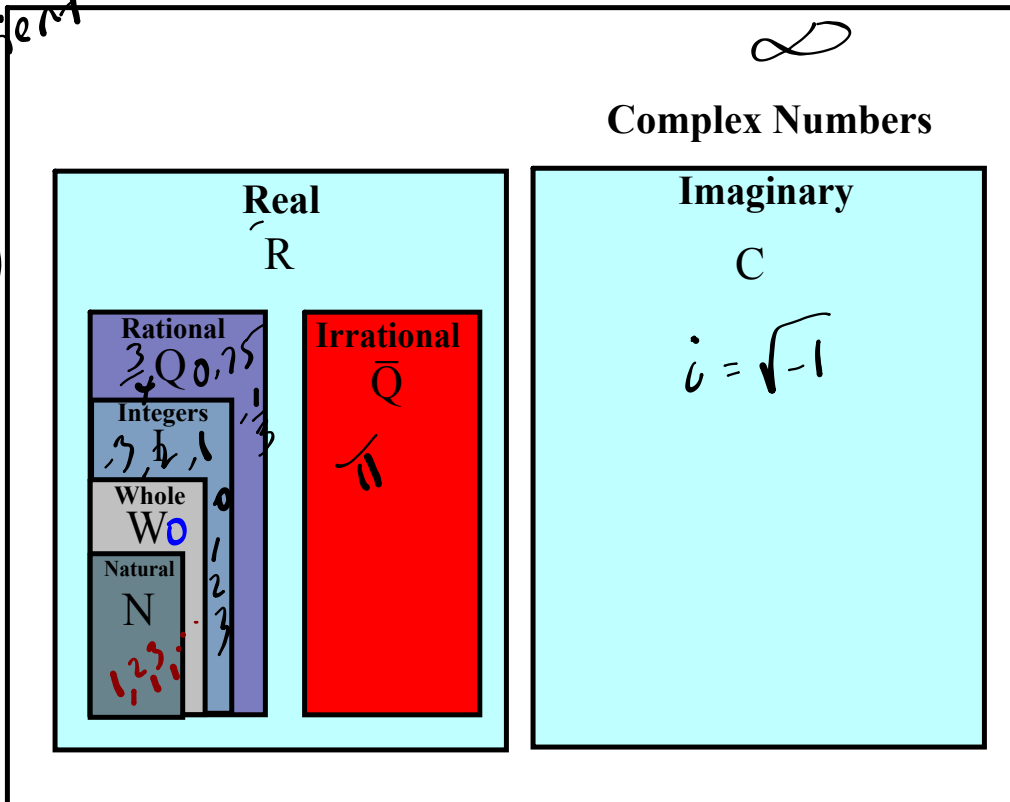
1.

STORYTIME: "The Complete Number System"

Q - quotient

π day

3/14

∞

Complex Numbers

Real

R

Imaginary

C

$$i = \sqrt{-1}$$

Rational

$\frac{3}{2}$ Q 0.75

$\frac{1}{3}$

Integers

3, $\frac{1}{2}$, 1

0

Whole

W 0

Natural

N

1, 2, 3

Irrational

$\overline{Q}$

π

N - 1, 2, 3, ...

W - 0, 1, 2, ...

I - $-\infty$, ..., -2, -1, 0, 1, 2, ... ∞

Q - Rational $\Rightarrow$ Decimal stops or repeats

$\overline{Q}$ - Irrational $\Rightarrow$ Decimal goes on forever

R - include all N, W, I, Q & $\overline{Q}$

HOMEWORK...

p. 221: #1 & #5

Attachments

Warm Up - Prior Knowledge for Coordinate Geometry.docx