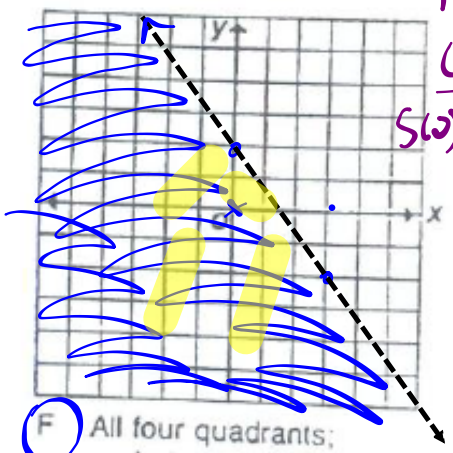
Hw???

(8) $5x + 3y < x + 6$



F All four quadrants; excludes boundary line.

P Quadrants I, II, III; excludes boundary line.

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

Test (0,0) $5x + 3y = x + 6$

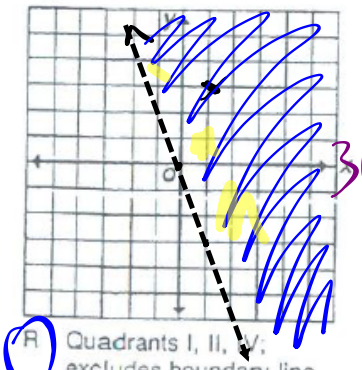
LS	<	RS
$5(0) + 3(0)$		$0 + 6$
0	<	6
	yes	

$3y = -5x + x + 6$

$\frac{3y}{3} = \frac{-4x}{3} + \frac{6}{3}$

$y = -\frac{4}{3}x + 2$

9 $3x + y > 0$



A Quadrants I, II, IV; excludes boundary line.

L All four quadrants; includes boundary line.

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

Test (1, 3)

LS	RS
$3(1) + (3)$	0
6 >	

$3x + y = 0$

$y = -3x$

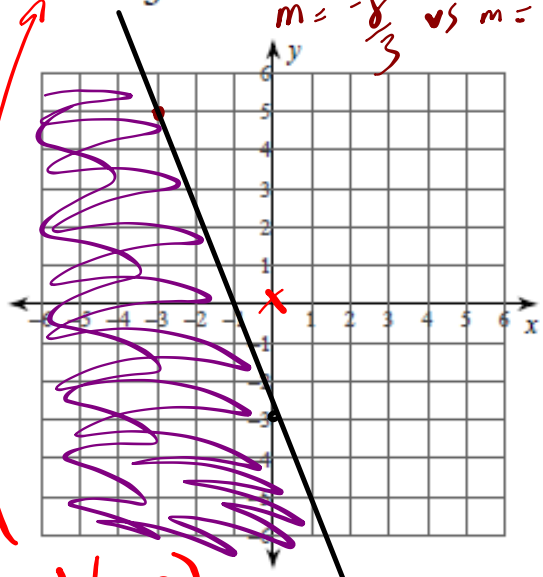
y-int = 0

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

1) $y \le -\frac{8}{3}x - 3$

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

$m = \frac{-8}{3}$ vs $m = \frac{8}{-3}$



Test (0,0)

LS ≤ RS

0	$\cancel{-\frac{8}{3}(0)} - 3$

$0 \le -3$ Not a solution

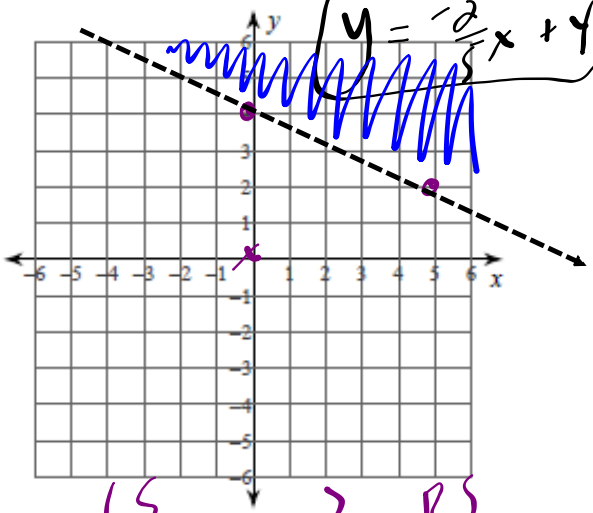
2) $2x + 5y - 20 > 0$

dashed

$2x + 5y - 20 = 0$

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

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



LS > RS

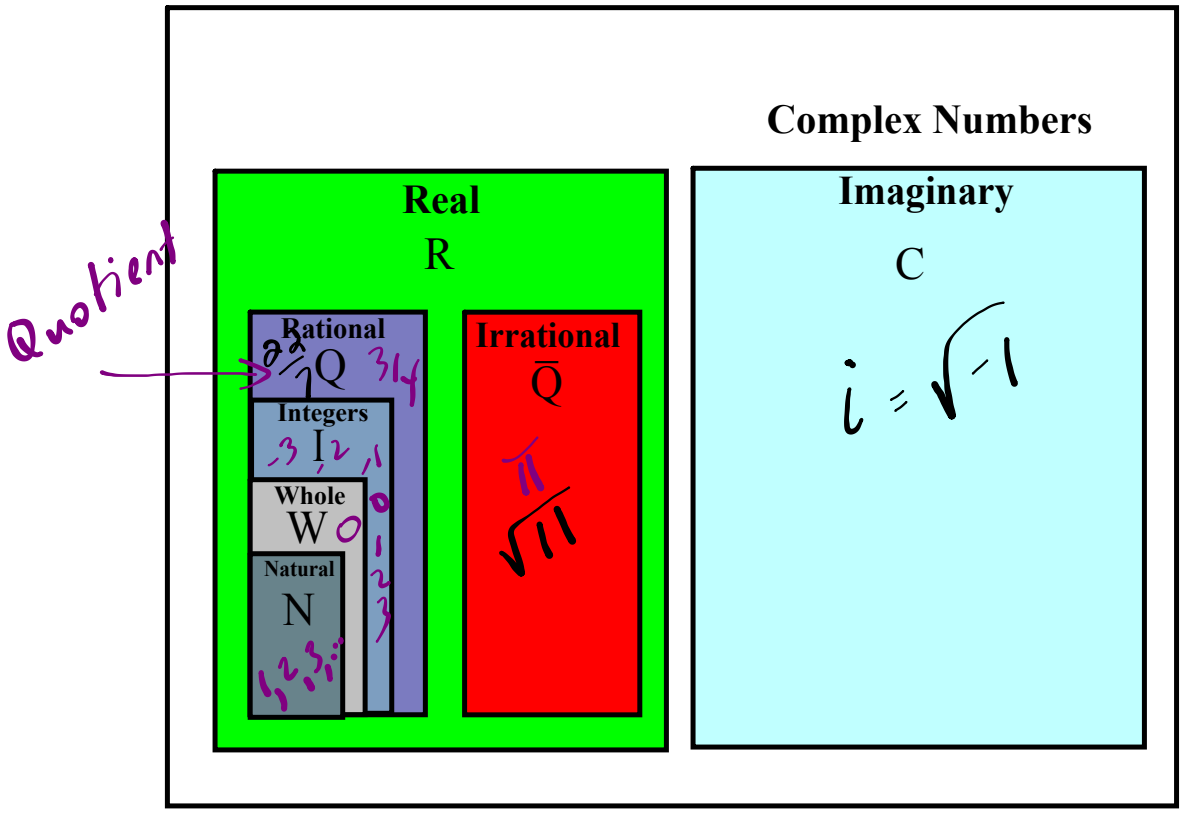
$\cancel{2(0) + 5(0)} - 20$	0
-20	

No

MEET PATTY

Their father was a BOAR

STORYTIME: "The Complete Number System"



REAL

N → 1, 2, 3, ... ∞

W → 0, 1, 2, ... ∞

I → −∞, ... −2, −1, 0, 1, 2, ... ∞

Q → Rational (decimal that stops or repeats)

Q̄ → Irrational (does not stop or repeat)

HOMEWORK...

p. 221: #1 & #5