

1. $12x - 3y > -21$

$12(6) - 3(-8) > -21$

$72 + 24 > -21$

$96 > -21$

TRUE

✓

$12x - 3y > -21$

$12(-4) - 3(-5) > -21$

$-48 + 15 > -21$

$-33 > -21$

FALSE

X

$12x - 3y > -21$

$12(0) - 3(7) > -21$

$-21 > -21$

FALSE

X

2. $y \geq -\frac{1}{3}x - 6$

$-8 \geq -\frac{1}{3}(6) - 6$

$-8 \geq -2 - 6$

$-8 \geq -8$

TRUE

✓

$y \geq -\frac{1}{3}x - 6$

$-5 \geq -\frac{1}{3}(-4) - 6$

$-5 \geq \frac{4}{3} - 6$

$-5 \geq -\frac{14}{3}$

FALSE

X

$y \geq -\frac{1}{3}x - 6$

$7 \geq -\frac{1}{3}(0) - 6$

$7 \geq -6$

TRUE

✓

3. $x < 6$

$6 < 6$

FALSE

X

$x < 6$

$-4 < 6$

TRUE

✓

$x < 6$

$0 < 6$

TRUE

✓

Match the coordinates to the inequality(ies) to which they are a solution.

1. $12x - 3y > -21$

A. $(6, -8)$

2. $y \geq -\frac{1}{3}x - 6$

B. $(-4, -5)$

3. $x < 6$

C. $(0, 7)$

You can check the solutions by:

- GRAPHING (Desmos)
- SUBSTITUTION