

REVISED 2023 (simplified)

Tell whether the ordered pair is a solution of the inequality.

1. $x + y > -9$; $(0, 0)$
 $0 + 0 > -9$
 $0 > -9$ (T)
SOLUTION
2. $x - y \geq 8$; $(14, 9)$
 $14 - 9 \geq 8$
 $5 \geq 8$ (F)
NOT A SOLUTION
3. $2x - y > 4$; $(-6, -15)$
 $2(-6) - (-15) > 4$
 $-12 + 15 > 4$
 $3 > 4$ (F)
NOT A SOLUTION

Graph the inequality.

10. $y < x + 6$ (DOTTED LINES) SR

$T(0, 0) \rightarrow 0 < 0 + 6$
 $0 < 6$ (T)

11. $y < x + 4$ (DOTTED LINES) SR

$T(0, 0) \rightarrow 0 < 4$ (F)

12. $y < \frac{1}{2}x + 1$ (DOTTED LINES) SR

$T(0, 0) \leftarrow 0 < 1$ (T)

MUST show this step

13. $y \leq \frac{3}{2}x - 3$ (SOLID LINES) SR

$T(0, 0) \rightarrow 0 \leq -3$ (F)

14. $y \leq 2x + 3$ (SOLID LINES) SR

$T(0, 0) \rightarrow 0 \leq 3$ (T)

15. PUT IN SI:

$-6y + 6 \geq -18x$

19. $y > 7$ SR

$T(0, 0) \rightarrow 0 > 7$ (F)

20. $x \leq -5$ SR

$T(0, 0) \rightarrow 0 \leq -5$ (F)