

1. Is (2, 3) a solution of $y > x + 1$?

$3 > 2 + 1$? $3 > 3$ is FALSE

Answer: No

2. Is (1, 5) a solution of $y > x + 1$?

$5 > 2$? Yes

Answer: Yes

3. $y \leq 2x + 4$: solid or dashed boundary?

$\leq$ includes the line

Answer: solid

4. $y < -x + 3$: solid or dashed?

$<$ excludes the line

Answer: dashed

5. Test (0,0) in $y < 3x + 2$. Shade that side?

$0 < 2$ true - shade the (0,0) side

Answer: yes, origin side

6. Is (4, 1) a solution of $y \geq x - 3$?

$1 \geq 1$? True

Answer: Yes

7. Graph $y \geq x - 2$ on grid paper: line type and shading?

Solid line, shade above

Answer: solid, shade above

8. Which points satisfy $y \leq -2x + 6$: (0,0), (4,0), (0,7)?

$0 \leq 6$ yes; $0 \leq -2$ no; $7 \leq 6$ no

Answer: (0,0) only

9. Write the inequality: 'the number of \$3 snacks (x) and \$2 drinks (y) can total at most \$18.' ★ challenge

Cost expression ≤ 18

Answer: $3x + 2y \leq 18$

10. For $3x + 2y \leq 18$: can you buy 4 snacks and 3 drinks? 2 snacks and 7 drinks? ★ challenge

$12 + 6 = 18 \leq 18$ yes

$6 + 14 = 20$ no

Answer: first yes, second no