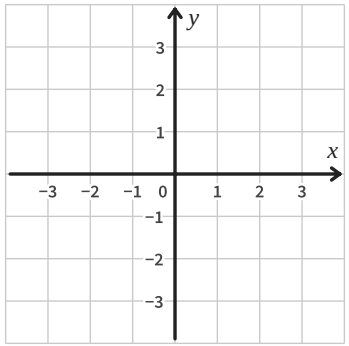
Inequalities and regions: the boundary line

1

Draw the boundary line of $x \leq 2$.

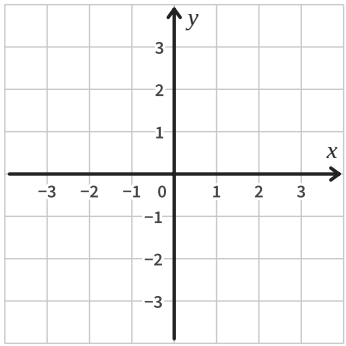


Solid

a vertical line through (2, 0)

2

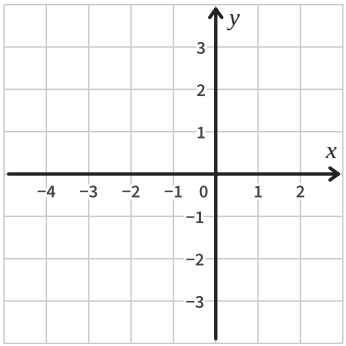
Draw the boundary line of $y > -1$.



Dashed

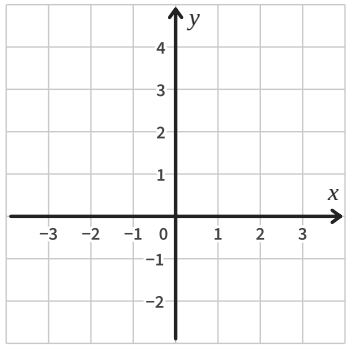
3

Draw the boundary line of $x < -2$.



4

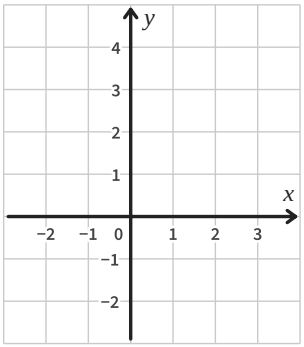
Draw the boundary line of $y \geq 2$.



5

Draw the boundary line of $y < x + 1$.

x	y
−1	0
0	
1	
2	

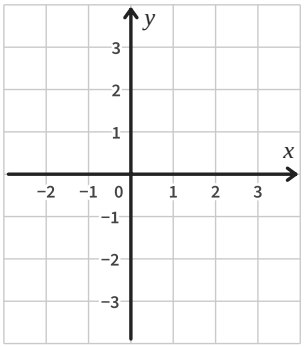


Dashed

6

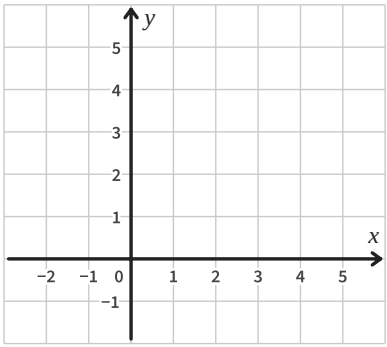
Draw the boundary line of $y \geq 2x - 1$.

x	y
−1	
0	
1	
2	



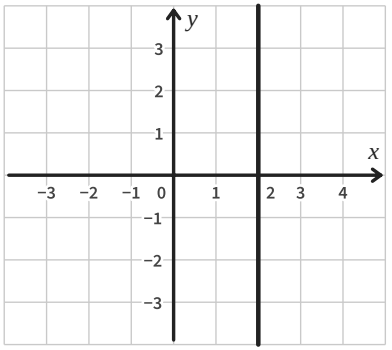
7

Draw the boundary line of $y > 4 - x$.



8

Ali draws the boundary line of $y < 2$ like this. Explain his two mistakes.



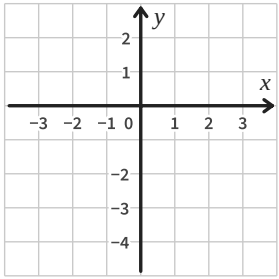
1:

2:

Inequalities and regions: the boundary line *further practice*

9

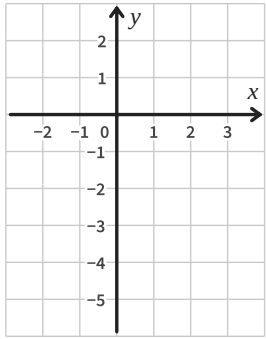
Draw the boundary line of $y < -2$.



Answer _____

10

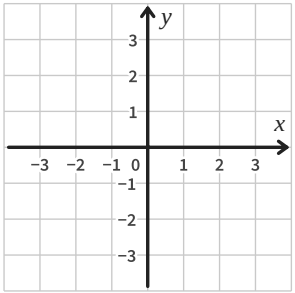
Draw the boundary line of $y \geq 2x - 3$.



Answer _____

11

Draw the boundary line of $y < -x$.



Answer _____

12

Which of these have a dashed boundary line? $x < 4$, $y \geq 1$, $y > 2x$, $x \leq -3$

Answer _____

13

The boundary line of an inequality is the dashed line $x = 4$. Write down an inequality it could be.

Answer _____

14

Is the point (2, 2) on the boundary line of $y \geq 3x - 4$? Show how you know.

Answer _____

15

Sam says the boundary line of $y \leq 3$ is a vertical line through (3, 0).
Explain his mistake.

Answer _____

16

A solid boundary line goes through (0, 2), (1, 5) and (2, 8). Write down the equation of the line.

Answer _____