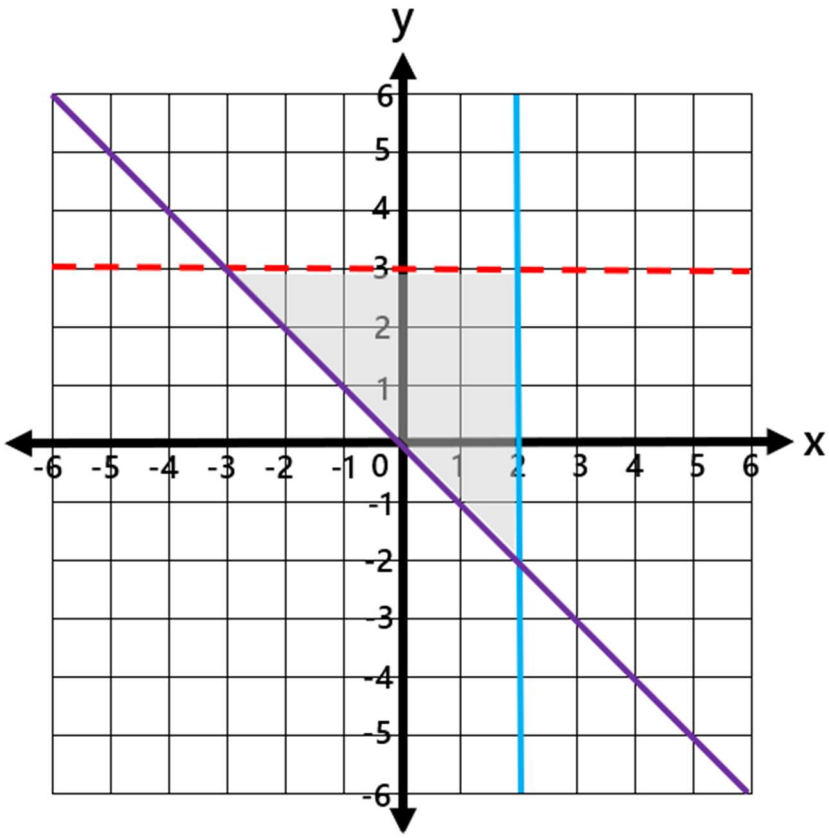
INEQUALITY REGIONS

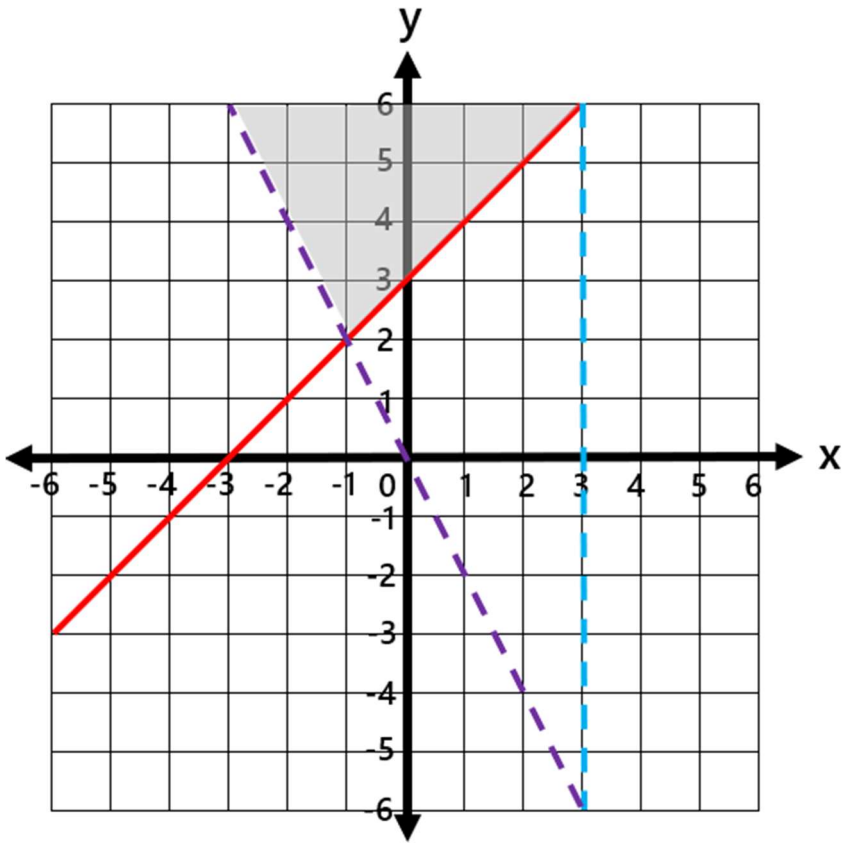
1) Use the grid below to shade the region that satisfies the inequalities.

$x \leq 2$ $y < 3$ $y \geq -x$



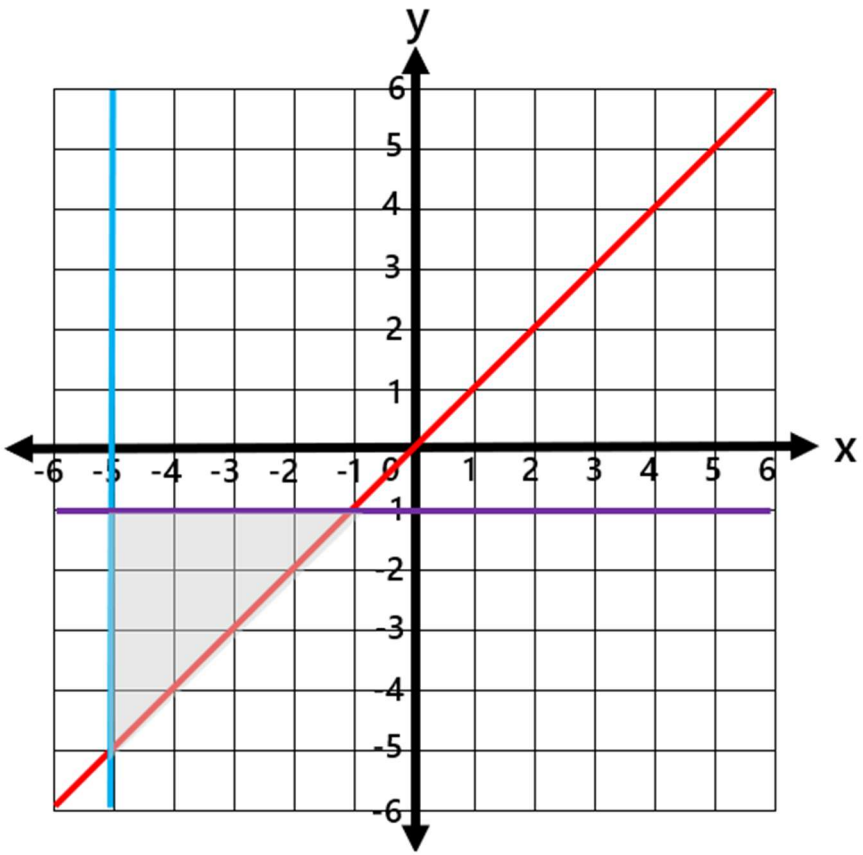
2) Use the grid below to shade the region that satisfies the inequalities.

$x < 3$ $y > -2x$ $y \geq x + 3$



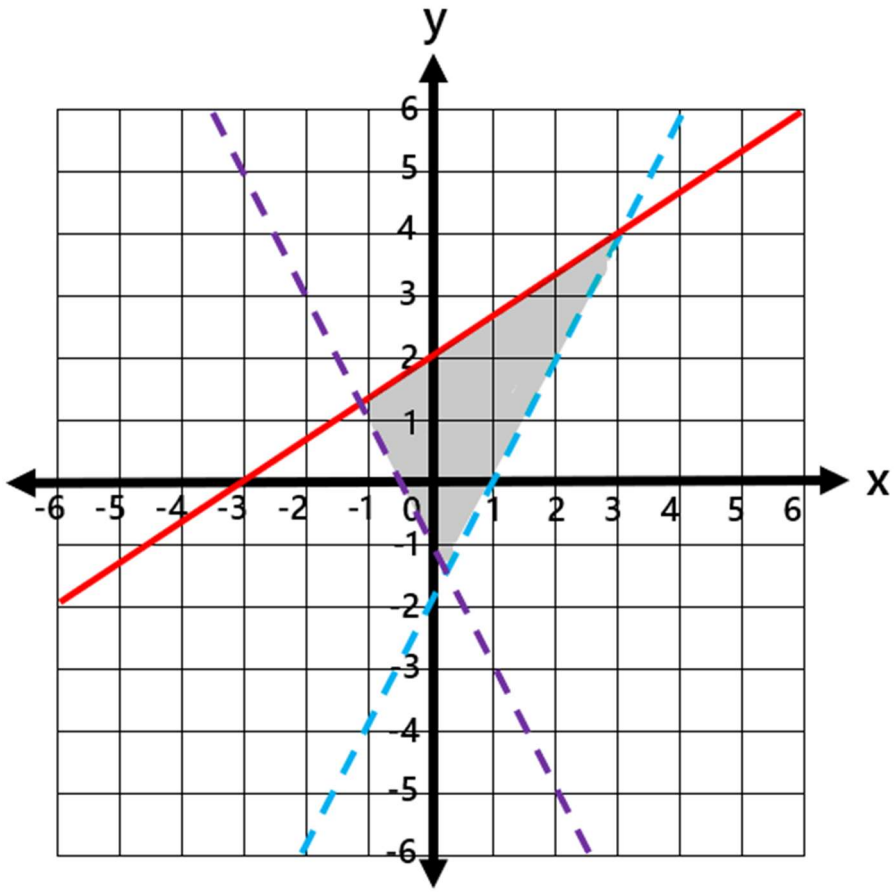
3) Use the grid below to shade the region that satisfies the inequalities.

$x \geq -5$ $y \leq -1$ $y \geq x$



4) Use the grid below to shade the region that satisfies the inequalities.

$y > 2x - 2$ $y \leq \frac{2}{3}x + 2$ $y > -2x - 1$



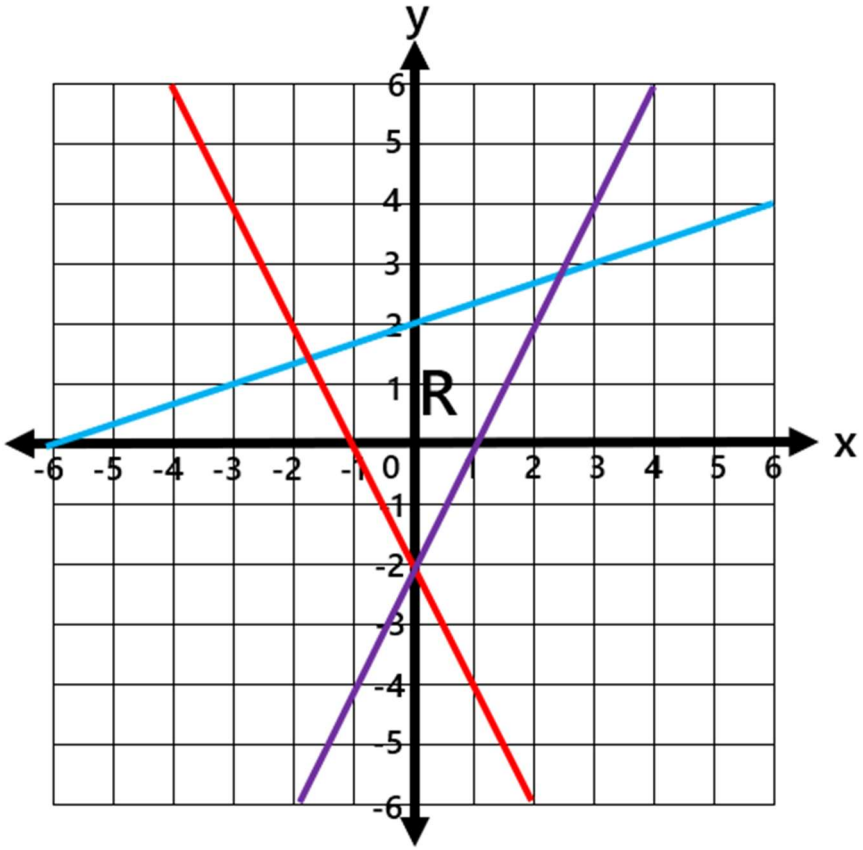
5) **Use the grid below to define the region that satisfies the inequalities.**

$3y \leq x + 6$
$y \leq \frac{1}{3}x + 2$

$2y + 4x \geq -4$
$2y \geq -4x - 4$
$y \geq -2x - 2$

$y - 2x \geq -2$
$y \geq 2x - 2$

Label the region R.



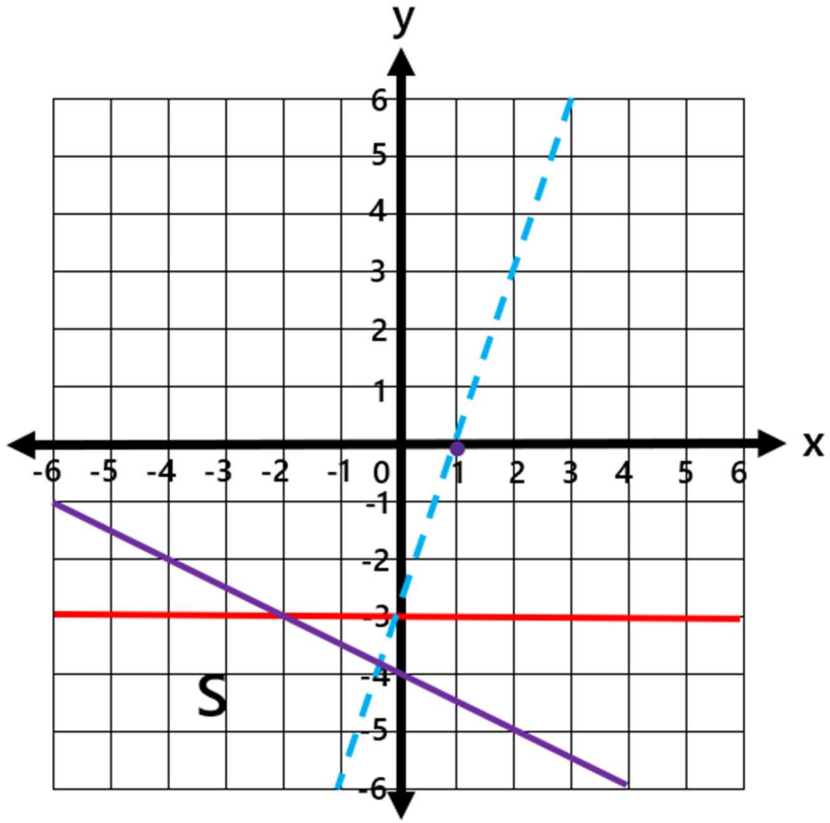
6) **Use the grid below to define the region that satisfies the inequalities.**

$y + 3 \leq 0$
$y \leq -3$

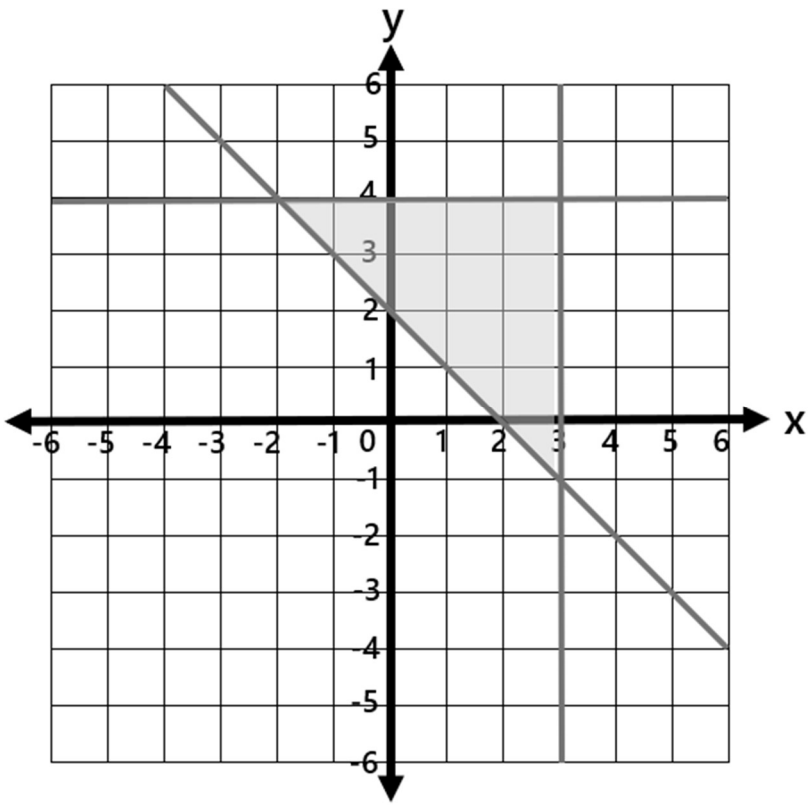
$2y > 6x - 6$
$y > 3x - 3$

$x + 2y + 8 \geq 0$
$2y \geq -x - 8$
$y \geq -\frac{1}{2}x - 4$

Label the region S.



7) Write down three inequalities that define the shaded region.

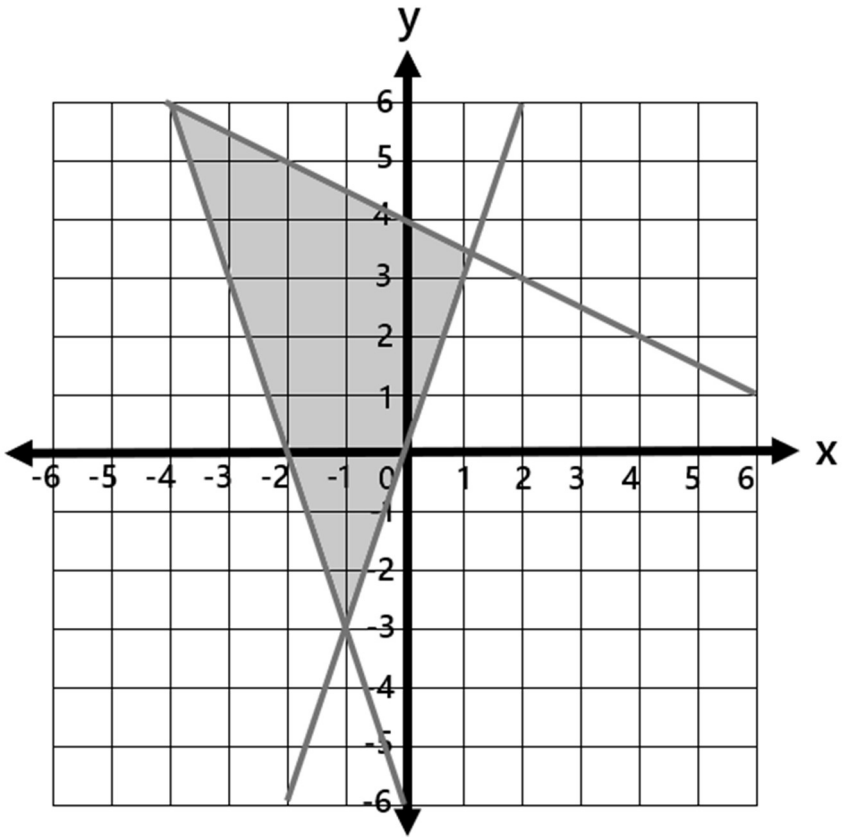


$x \leq 3$

$y \leq 4$

$y \geq -x + 2$

8) Write down three inequalities that define the shaded region.

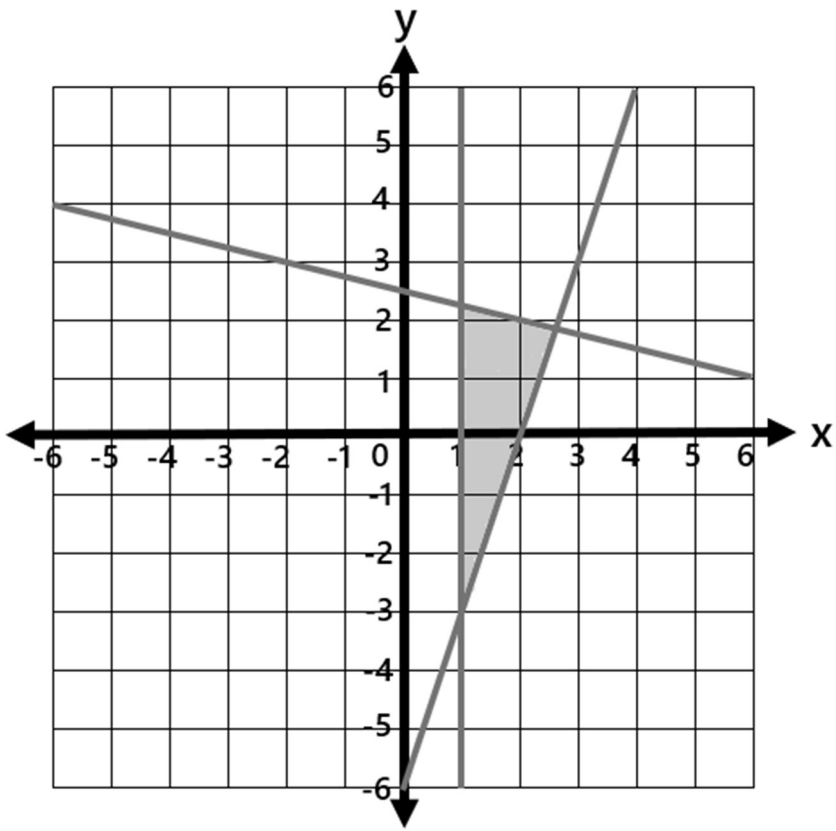


$y \leq -\frac{1}{2}x + 4$

$y \geq -3x - 6$

$y \geq 3x$

9) Write down three inequalities that define the shaded region.

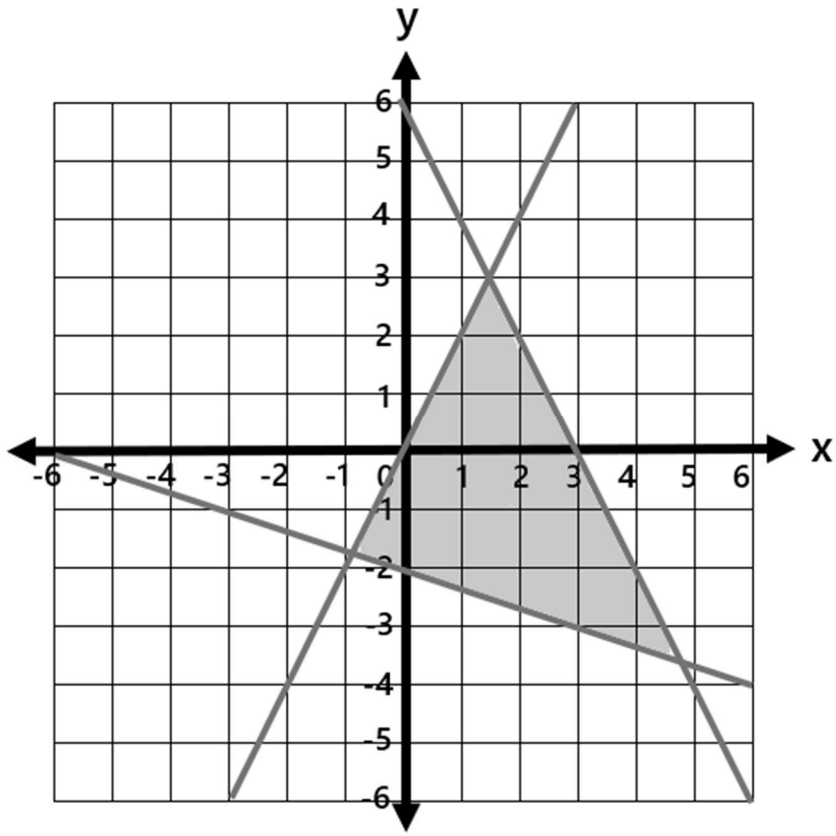


$x \geq 1$

$y \leq -\frac{1}{4}x + \frac{5}{2}$

$y \geq 3x - 6$

10) Write down three inequalities that define the shaded region.



$y \leq 2x$

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

$y \leq -2x + 6$