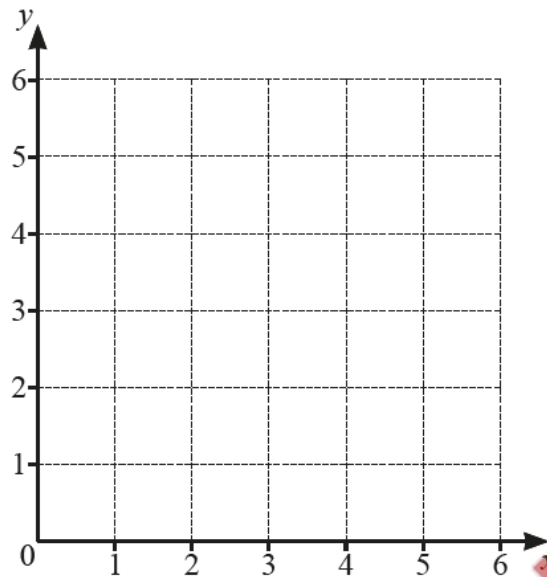


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The region R is defined by these inequalities.

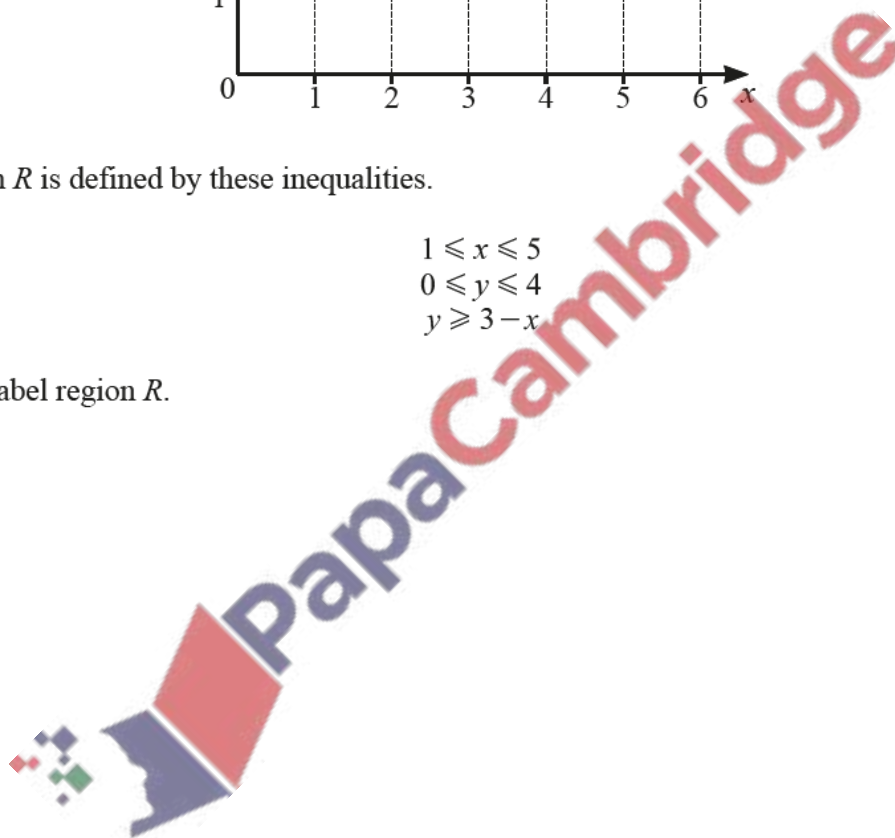
$$1 \leq x \leq 5$$

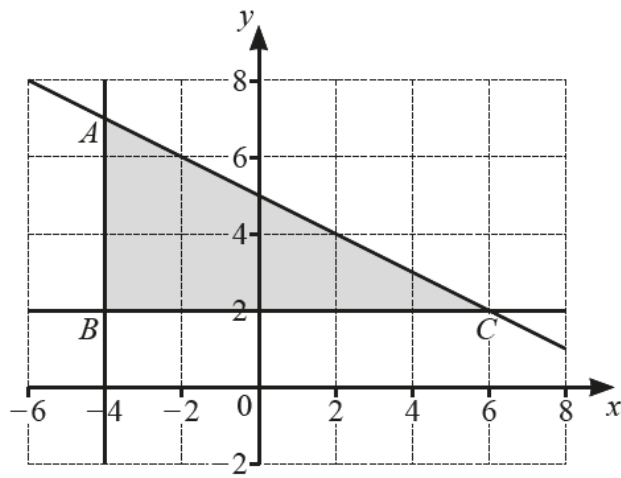
$$0 \leq y \leq 4$$

$$y \geq 3 - x$$

Find and label region R .

[4]





The diagram shows a shaded region ABC .

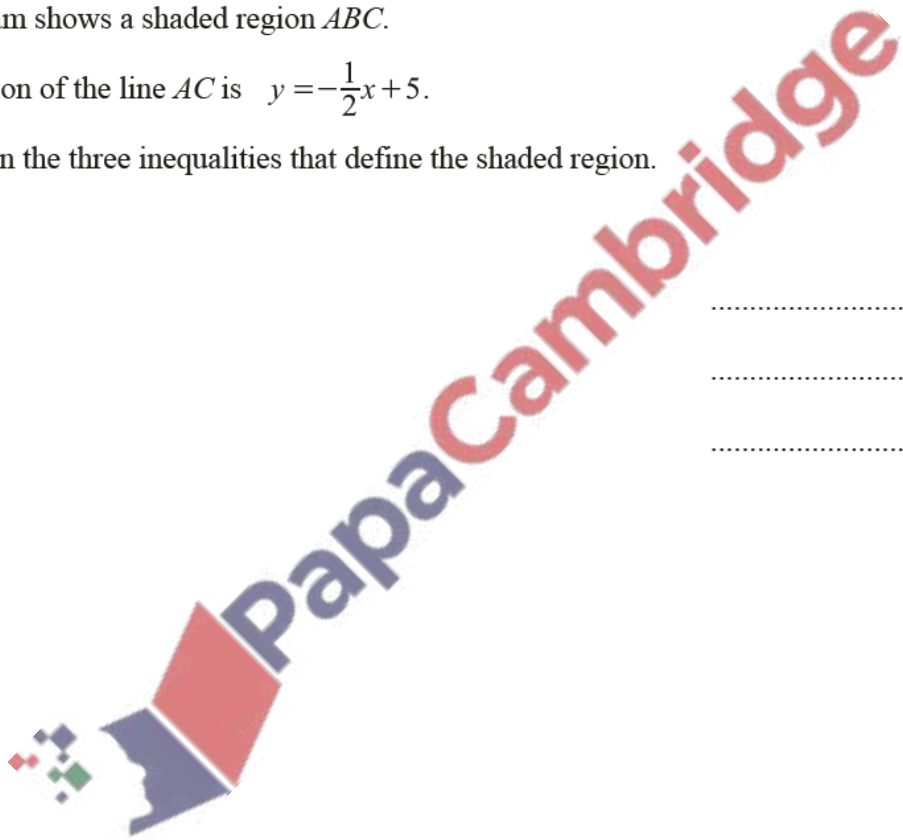
The equation of the line AC is $y = -\frac{1}{2}x + 5$.

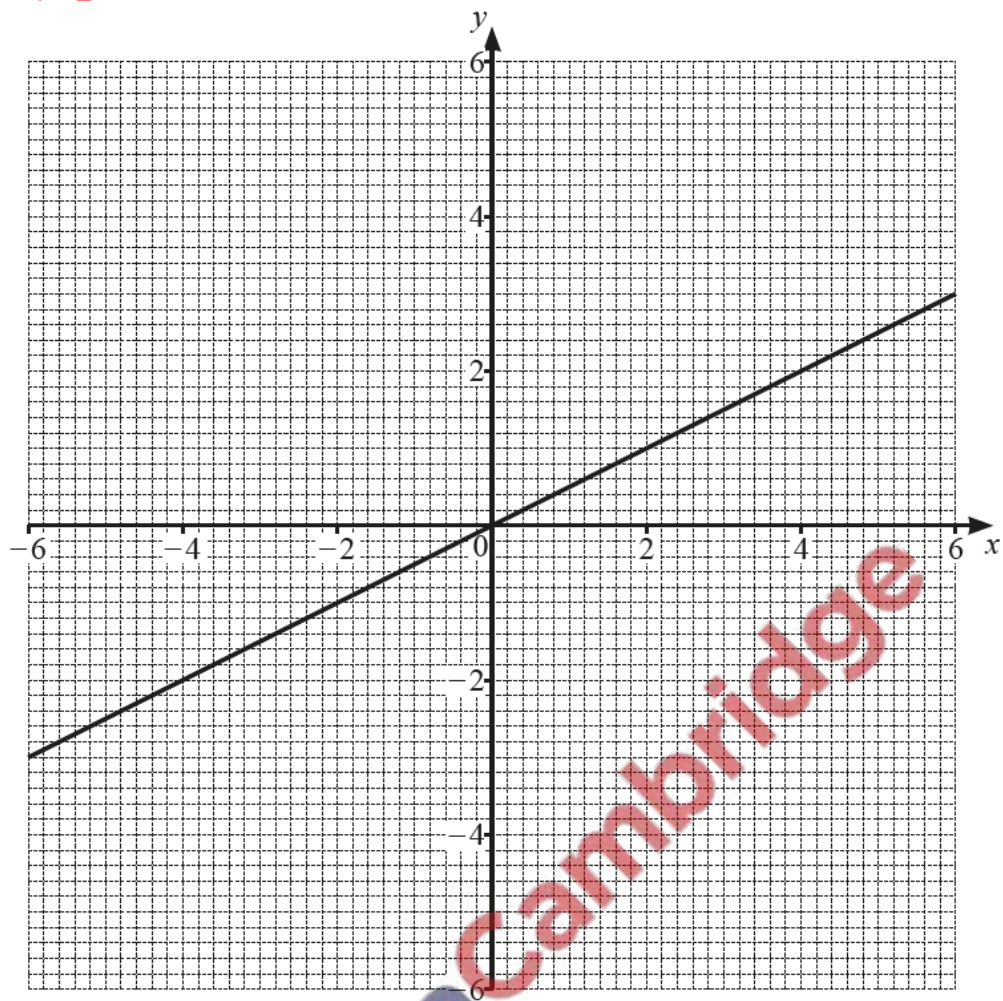
Write down the three inequalities that define the shaded region.

.....

.....

..... [2]





The line $2y = x$ is drawn on the grid.

(a) On the grid, draw the graph of

(i) $y = 2,$

[1]

(ii) $y + x = 4.$

[1]

(b) On the grid, shade and label the region **R**, defined by the following inequalities.

$x + y \leq 4$

$2y \geq x$

$y \leq 2$

$x \geq 0$

[2]