

Name: _____

Exam Style Questions



Graphical Inequalities Corbettmaths

Ensure you have: Pencil, pen, ruler, protractor, pair of compasses and eraser

You may use tracing paper if needed

Guidance

1. Read each question carefully before you begin answering it.
2. Don't spend too long on one question.
3. Attempt every question.
4. Check your answers seem right.
5. Always show your workings

Revision for this topic

www.corbettmaths.com/contents

Video 180

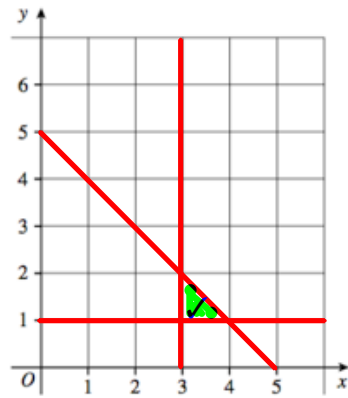
Video 181

Video 182



1. On the grid, clearly indicate the region that satisfies all these inequalities.

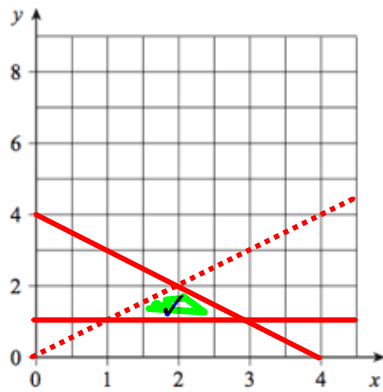
$$x \geq 3 \quad y \geq 1 \quad x + y \leq 5$$



(3)

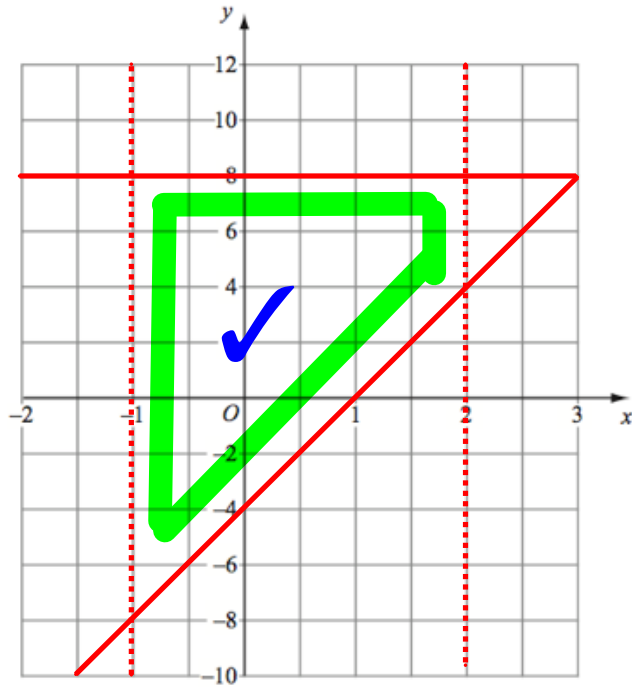
2. On the grid, clearly indicate the region that satisfies all these inequalities.

$$y < x \quad y \geq 1 \quad x + y \leq 4$$



(3)

3.



On the grid, label the region that satisfies all three of these inequalities

$$-1 < x < 2$$

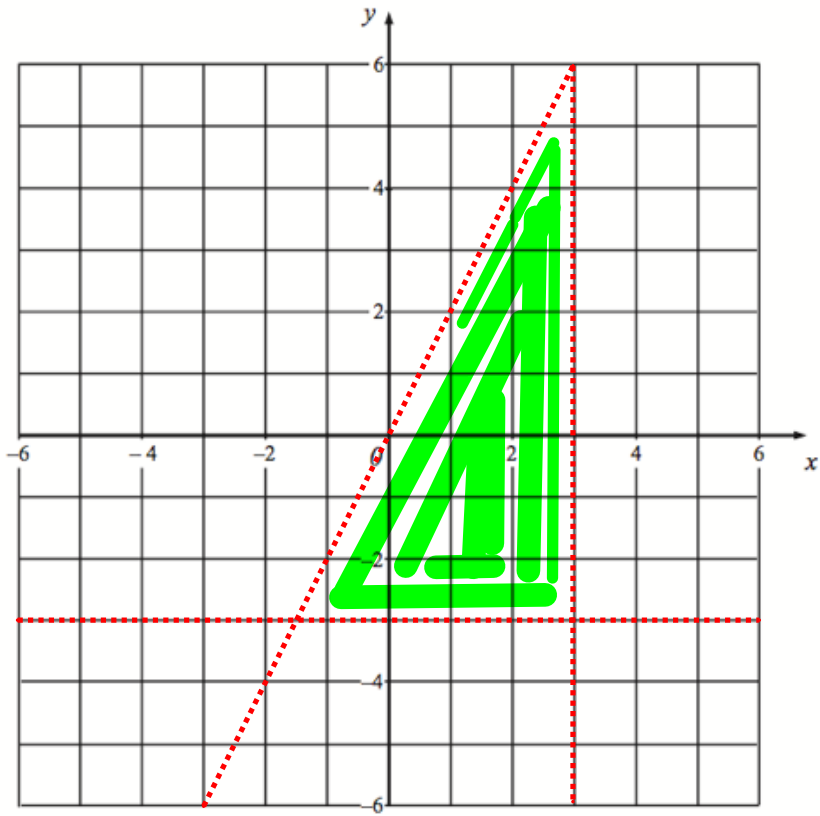
$$y \leq 8$$

$$y \geq 4x - 4$$

(4)

4. On the grid, label the region that satisfies all three of these inequalities

$$x < 3 \quad y > -3 \quad y \leq 2x$$



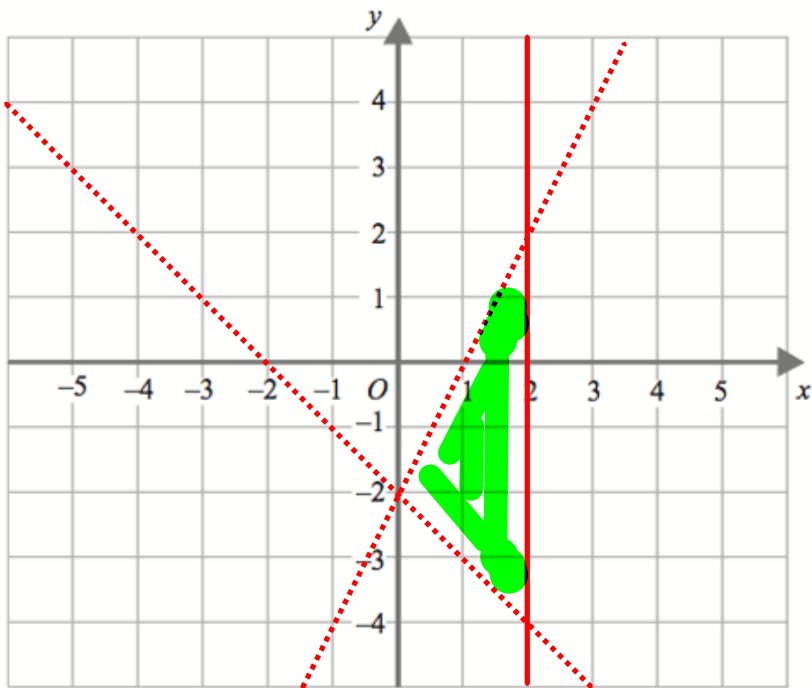
(3)

5. On the grid, clearly label the region which satisfies all three inequalities below

$$x \leq 2$$

$$y < 2x - 2$$

$$x + y + 2 > 0$$



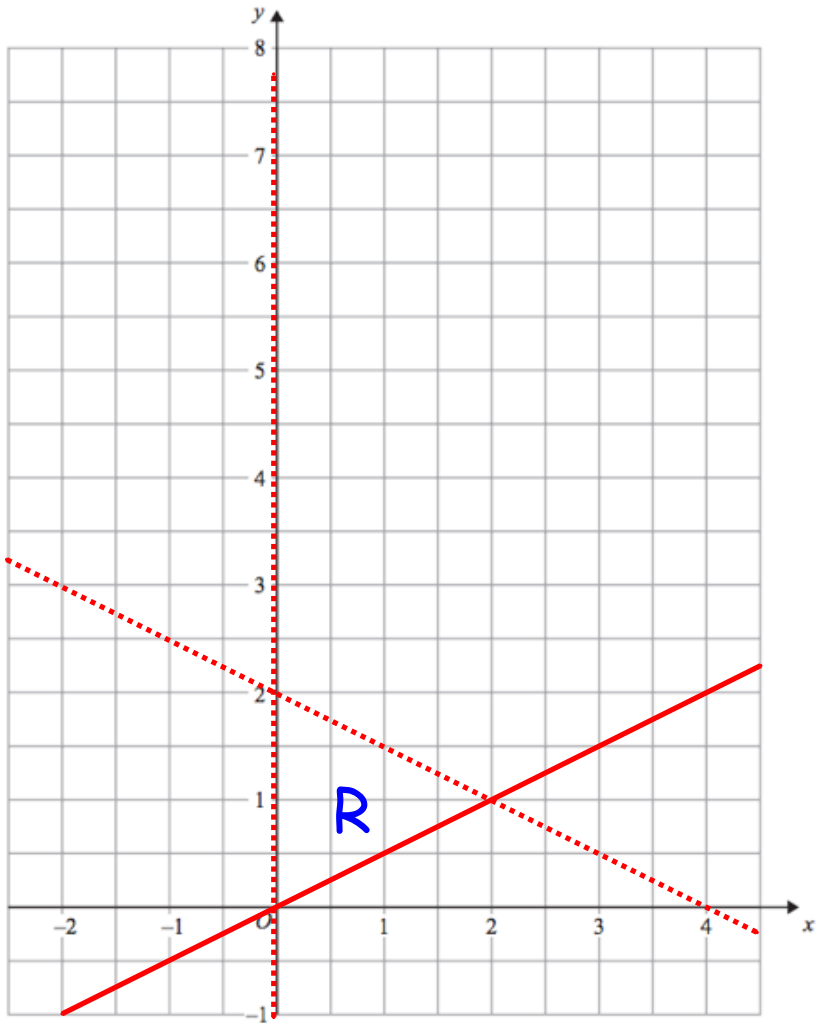
(4)

6. On the grid, clearly label the region which satisfies all three inequalities below

$x > 0$

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

$x + 2y < 4$



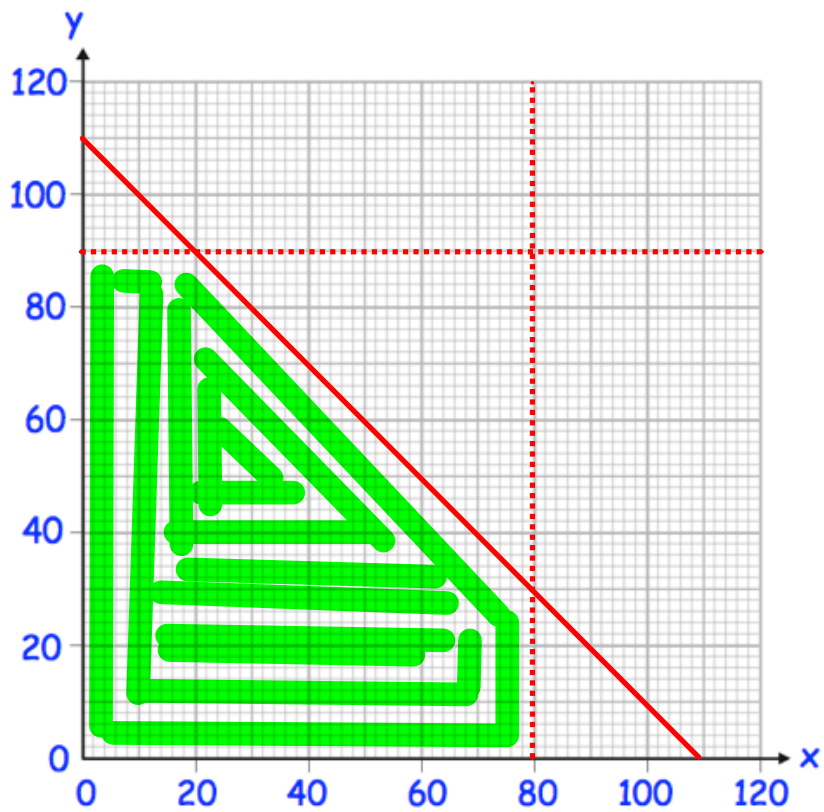
(4)

7. A greengrocer sells bananas and apples.
In one day he sells
up to 80 bananas
up to 90 apples
no more than a total of 110 pieces of fruit

$$x < 80$$
$$y < 90$$
$$x + y \leq 110$$

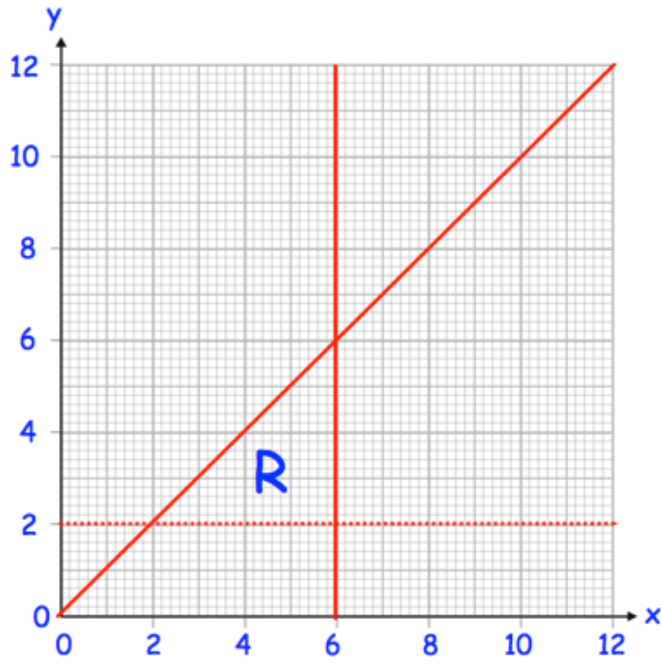
Let x be the number of bananas sold
Let y be the number of apples sold.

Show the region below that satisfies these inequalities



(4)

8.



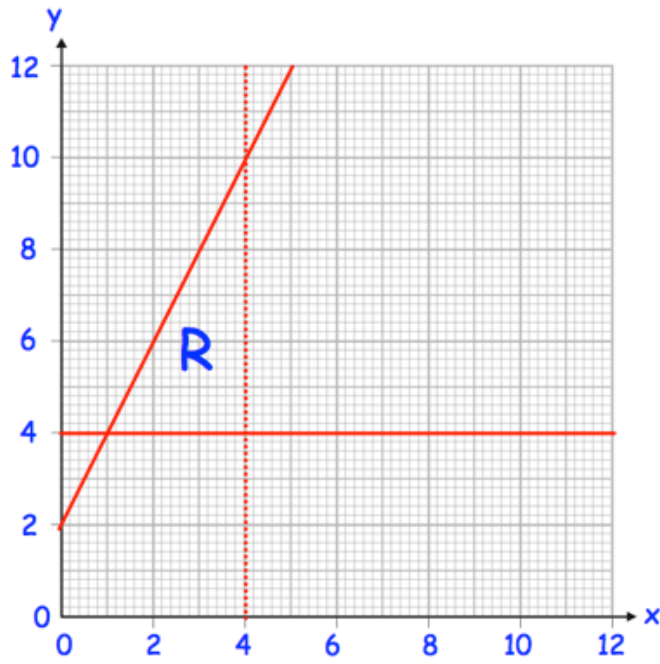
The region labelled R satisfies three inequalities.

State the three inequalities

$$\begin{array}{l} x \leq 6 \\ y > 2 \\ y \leq x \end{array}$$

(3)

9.

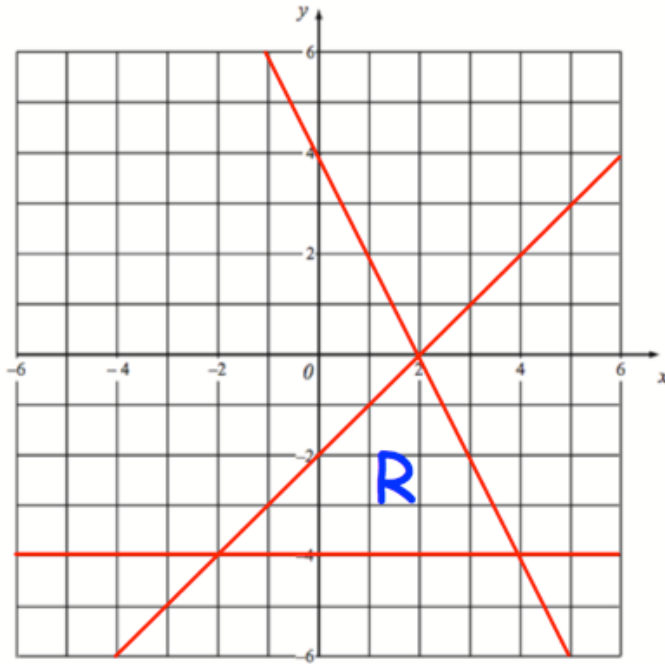


The region labelled R satisfies three inequalities.

State the three inequalities

$$\begin{array}{l} x < 4 \\ \hline y \geq 4 \\ \hline y \leq 2x + 2 \\ \hline \end{array} \quad (3)$$

10.



The region labelled R satisfies three inequalities.

State the three inequalities

$$\begin{aligned} & \underline{y \geq -4} \\ & \underline{y \leq x - 2} \\ & \underline{y \leq -2x + 4} \end{aligned}$$

(3)