Graphing Inequalities (From OCR 6993)

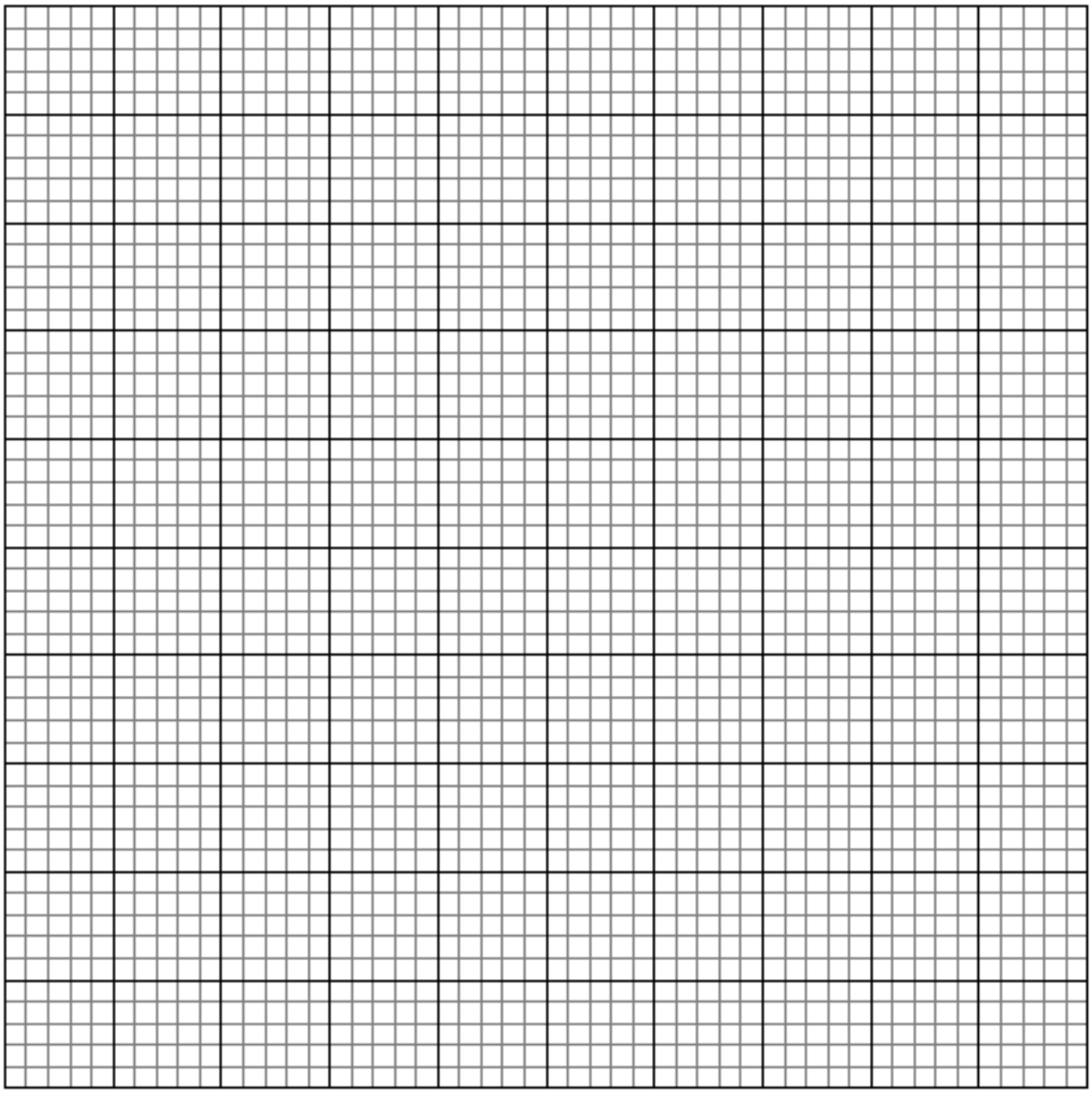
Q1, (Jun 2009, Q10)

(i) Illustrate on one graph the following three inequalities.

$$y \geqslant x - 1$$
$$x \geqslant 2$$
$$2x + y \geqslant 8$$

Draw suitable boundaries and shade areas that are **excluded**. **[4]**

(ii) Write down the minimum value of y in this region. **[1]**

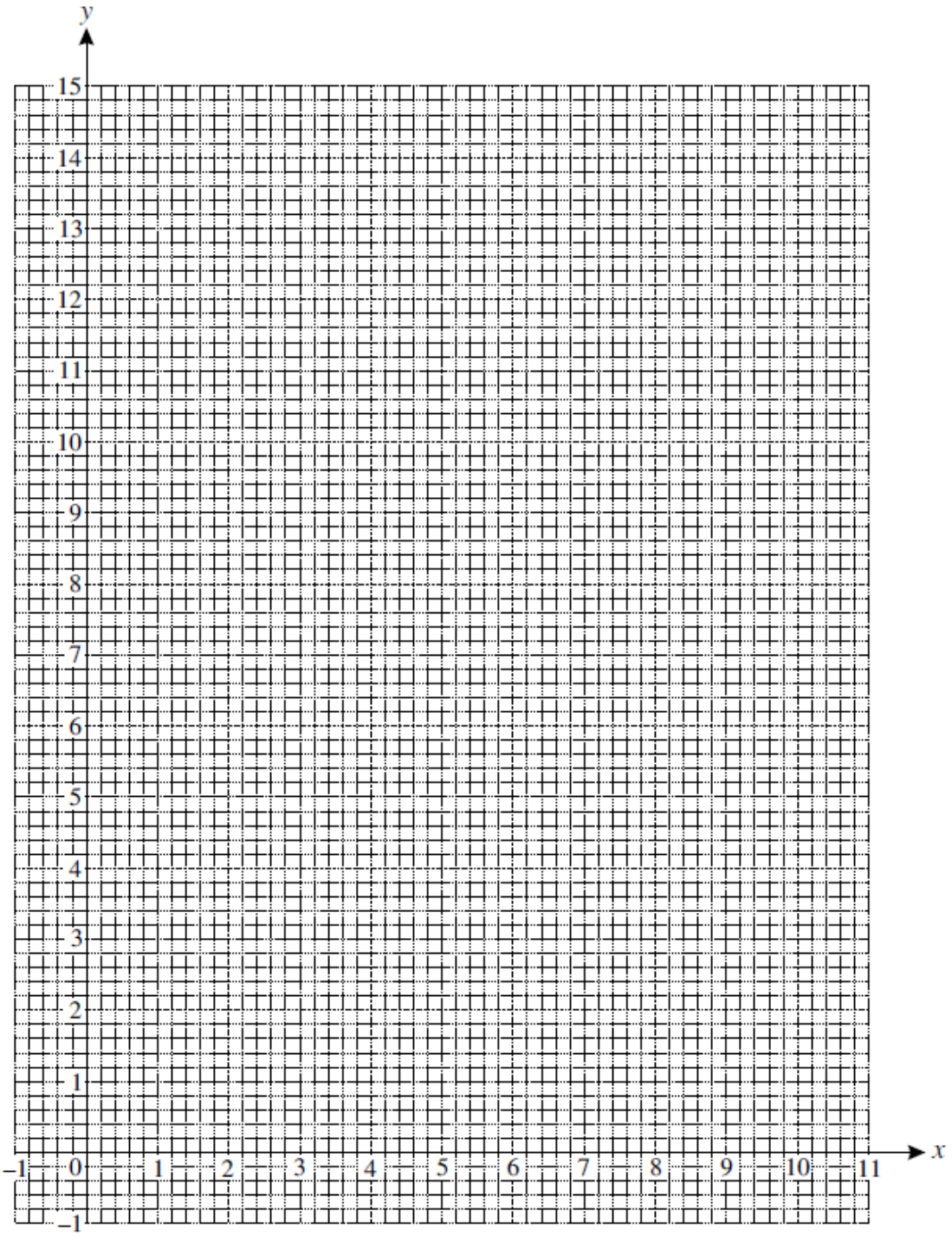


Q2, (Jun 2011, Q8i)

On the axes given, indicate the region for which the following inequalities hold. You should shade the region which is **not** required.

$$5x + 3y \geqslant 30$$
$$3x + y \geqslant 12$$
$$y \geqslant 0$$
$$x \geqslant 0$$

[5]



Q3, (Jun 2016, Q10i)

On the axes given in the Printed Answer Book, indicate the region for which the following inequalities hold. You should shade the region that is **not** satisfied by the inequalities.

$$4x + 3y \leqslant 30$$
$$y \geqslant 2x$$
$$x \geqslant 1$$

[5]