

Answer ALL ELEVEN questions.

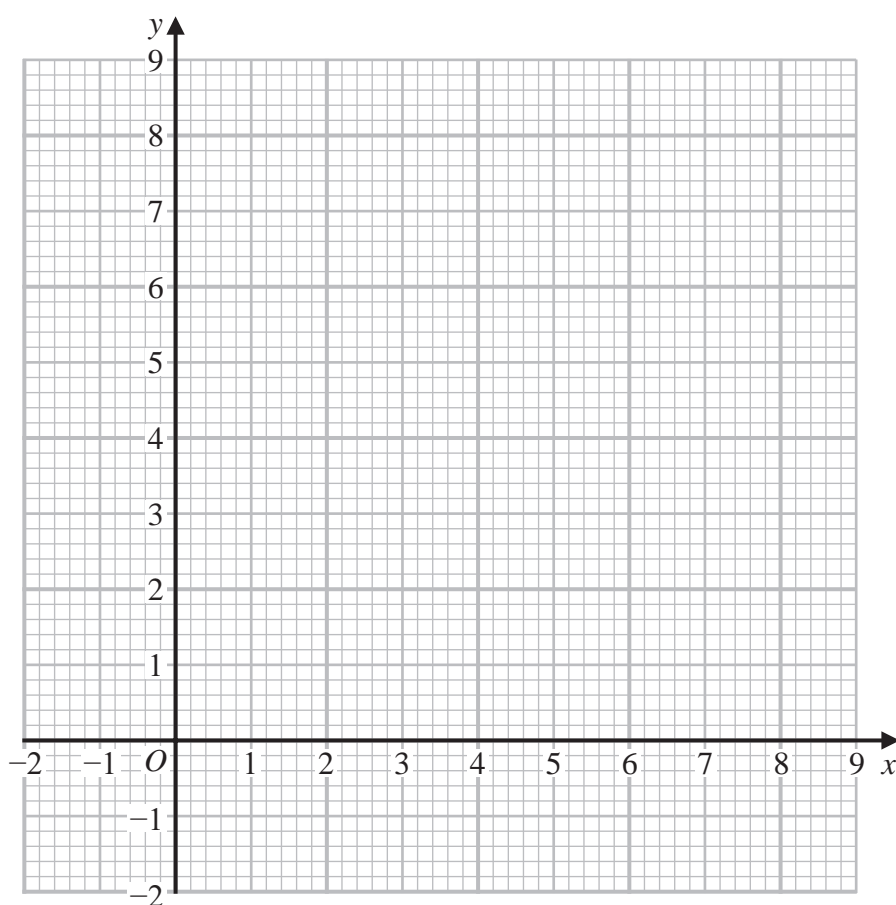
Write your answers in the spaces provided.

You must write down all the stages in your working.

- 1 (a) By drawing suitable straight lines on the grid below, show, by shading, the region R defined by all of the inequalities

$$y \leq x \quad x + y \leq 8 \quad y \geq 2$$

Label the region R .



(3)

The point P with coordinates (x, y) is a point of the region R .

Given that x and y are **integers** and that P lies on the straight line with equation $x - 2y + 2 = 0$

- (b) write down the coordinates of **all** possible points P .

(2)

.....

.....

.....



DO NOT WRITE IN THIS AREA

(Total for Question 1 is 5 marks)

