

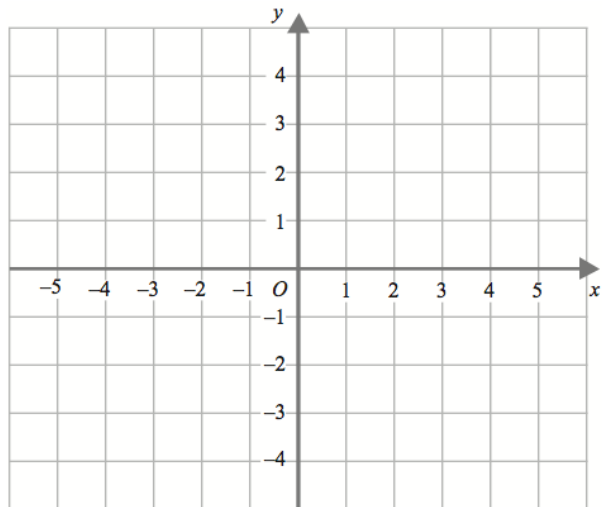


Show the region which satisfies

$$-1 < x < 3$$

$$y \geq -2$$

$$x + y < 1$$



$$\mathbf{b} = \begin{pmatrix} -5 \\ 6 \end{pmatrix}$$

Write down a vector parallel to  $\mathbf{b}$

Solve, giving your answers to one decimal place.

$$2x^2 + 3x - 100 = 0$$

H varies directly to the cube of c.

When  $H = 40$ ,  $c = 2$ .

Express H in terms of c.

Find the value of H when  $c = 5$ .

Find the value of c when  $H = 5000$ .