

17th January



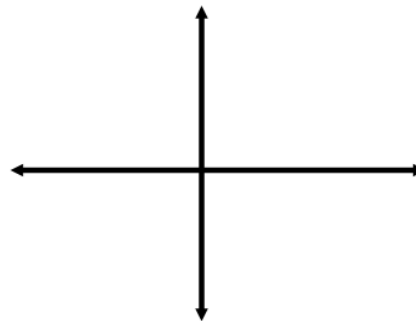
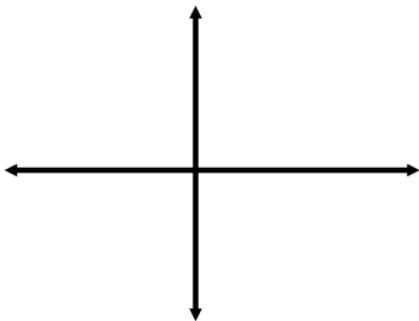
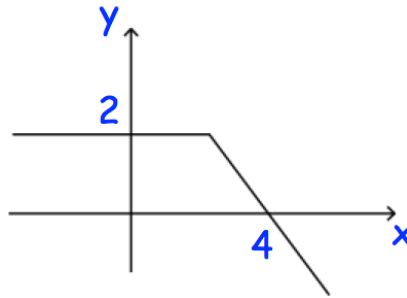
Corbettmaths

Simplify fully

$$\frac{4x^2 - 25}{6x^2 - 11x - 10}$$

Shown is the graph of the function
 $y = f(x)$

Sketch

(a) $f(x + 1)$ (b) $f(-x)$ 

A formula for the area of a regular hexagon with side length x is given.
 Prove this formula.

$$\text{Area} = \frac{3}{2} \sqrt{3} x^2$$

The straight line l_1 has equation
 $3x + y - 1 = 0$
 The straight line l_2 is perpendicular to line
 l_1 and passes through the point $(8, 2)$

Find the equation of l_2 in the form
 $y = mx + c$