



Are the lines  $4x - y - 5 = 0$  and  $x + 4y + 1 = 0$  perpendicular?

Helen says that the cosine of an angle is  $-1$ .

Write down three possible angles

Solve the simultaneous equations

$$x^2 + y^2 = 5$$

$$2x + y - 5 = 0$$

For all values of  $x$

$$f(x) = \frac{2x + 1}{4}$$

Find

$$f^{-1}(x)$$

The graph with equation  $y = x^3$  is translated by the vector

$$\begin{pmatrix} -1 \\ 0 \end{pmatrix}$$

Write down the equation of the translated graph