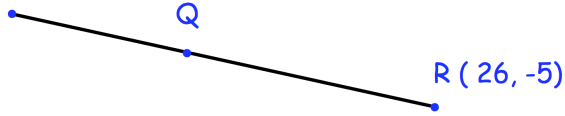


26th March

Corbettmaths

P(-6, 11)



R (26, -5)

PQR is a straight line.

PQ : PR = 3 : 8

Work out the coordinates of the point Q

A circle has equation

$$(x + 7)^2 + (y - 5)^2 = 4$$

Write down the equation of a tangent to the circle

The transformation matrix $\begin{pmatrix} a & b \\ -a & 2b \end{pmatrix}$ maps the point $(2, -4)$ onto the point $(10, 40)$

Find the values of a and b

$$y = \frac{2}{3}x^9 - \frac{1}{2}x^4$$

Work out the value of $\frac{d^2y}{dx^2}$ when $x = -1$