

4th November

Corbettmaths

$$y = x^4 - 2x^3$$

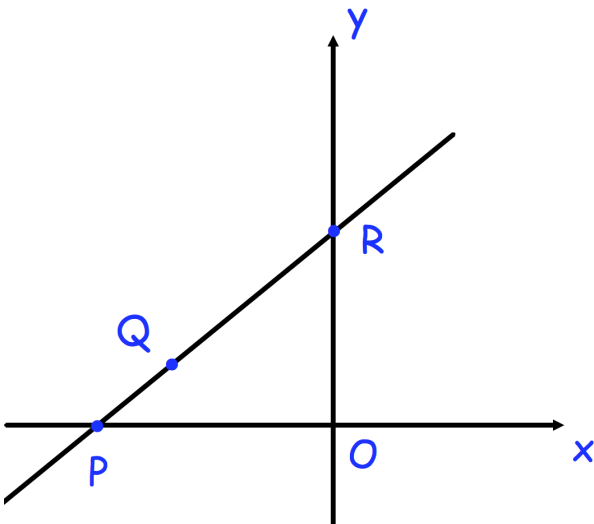
Work out $\frac{d^2y}{dx^2}$

$$g(x) = x^3 - 5 \quad \text{for } -5 \leq x \leq -1$$

Work out the range of $g(x)$

In Year 10 there are 40 girls.
Two of the girls are going to be chosen
at random to go on a trip.

Work out the number of different pairs
that can be chosen.



The line $3x - 2y + 24 = 0$ passes
through P, Q and R.

$$PQ : QR = 1 : 3$$

Find the equation of the straight line
that passes through points Q and O.