

**18th August**

Corbettmaths

Make  $q$  the subject of  $\frac{p}{qr} = 4 - \frac{1}{r}$

Solve the simultaneous equations

$$x + 8y + z = 33$$

$$2x - 2y + 3z = 19$$

$$5x - 4y + 2z = 12$$

A curve has a gradient function  $\frac{2x^3 - 9}{10}$

The point  $P$  is a point on the curve.

The tangent to the curve at the point  $P$  is perpendicular to the line

$$2x - 5y + 3 = 0$$

Work out the  $x$ -coordinate of  $P$