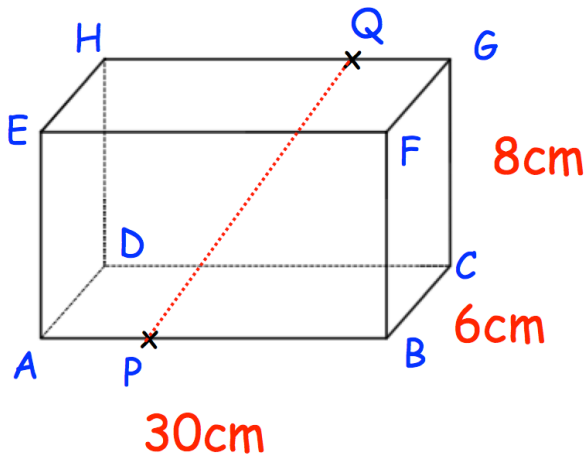


13th November



Corbettmaths



Calculate the angle between the line PQ and the plane ABCD.

P is a point on AB such that AP:PB is 1:2
 Q is a point on GH such that GQ:QH is 2:3

$$y = 3x^{\frac{5}{2}}(x^{\frac{1}{2}} + x^{\frac{9}{2}})$$

Work out $\frac{dy}{dx}$

Given that

$$\begin{pmatrix} 5 & 1 \\ -3 & 2 \end{pmatrix} \begin{pmatrix} c \\ d \end{pmatrix} = \begin{pmatrix} d+6 \\ -4c-4d \end{pmatrix}$$

Work out the values of c and d