

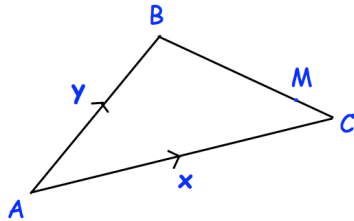
10th October



Corbettmaths

Write down the exact value of

$$\tan 30^\circ + \tan 60^\circ$$

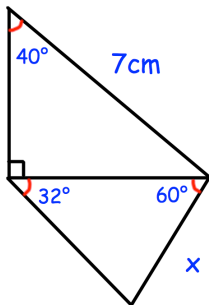


ABC is a triangle.
M lies on BC such that $BM = \frac{3}{4} BC$

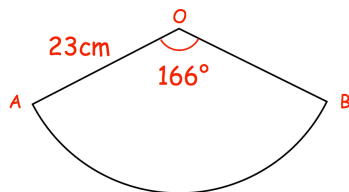
Express \vec{AM} in terms of \mathbf{x} and \mathbf{y}

Solve the simultaneous equations

$$\begin{aligned} x^2 + y^2 &= 13 \\ x - 2y &= 1 \end{aligned}$$



Find x



Shown is sector OAB of circle centre O.
OA and OB are joined to make a cone.
Calculate the volume of the cone.