

23rd August

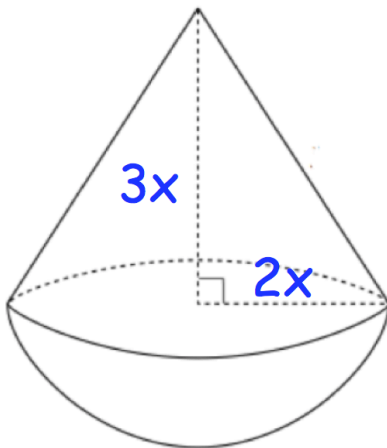
Corbettmaths

Express $2x^2 - 12x + 13$ in the form $a(x - b)^2 + c$

Solve $2x^2 - 12 + 7 = 0$
giving your answers in surd form.

Work out the matrix that transforms the unit square by a 180° rotation about O .

The diagram shows a solid made up of a cone and a hemisphere.



The radius of the cone is x
The height of the cone is $2x$.

Show the volume of the solid is $\frac{28}{3}\pi x^3$