

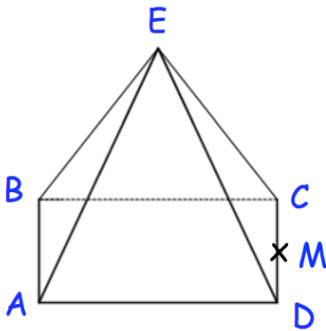
**5th March**

Corbettmaths

A circle, centre  $(-6, 4)$  has circumference  $14\pi$

Work out the equation of the circle.

Shown below is a rectangular based pyramid.  
The apex E is directly over the centre of the base of the pyramid.



$AD = 8\text{cm}$                        $CD = 6\text{cm}$   
 $CE = 11\text{cm}$

Work out the angle between the plane CDE and plane ABCD

A curve has equation  $y = x^3 - 3x + 5$

Find the coordinates of the two stationary points and determine their nature.