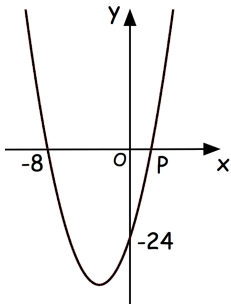




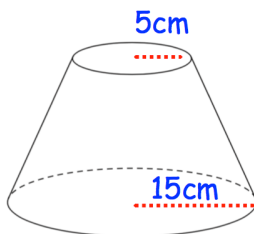
Below is a sketch of the graph  
 $y = x^2 + bx + c$

The curve passes through the points  
 $(-8, 0)$ ,  $(0, -24)$  and  $(P, 0)$



Work out the coordinates of the turning point of the graph.

A frustum is made from cutting a small cone from the top of a larger cone.  
The larger cone was 21cm tall.



Calculate the volume of the frustum

Find the equation of the line  
perpendicular to  $x + 4y - 6 = 0$   
and passing through  $(1, 8)$