



NOT TO
SCALE

The diagram shows a major sector, AOB , of a circle.
The sector angle is 240° and the radius is 12 cm.

- (a) Show that the length of the major arc AB is 16π cm.

[1]

- (b) OA is joined to OB to form a cone.

Work out the volume of the cone.

Give your answer in the form $\frac{(a\sqrt{b})\pi}{3}$ where a is an integer and b is a prime number.

..... cm^3 [6]