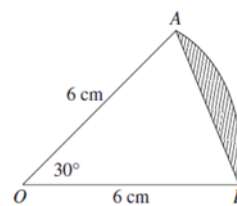




- TG**    **1**    In the diagram,  $OAB$  is a sector of the circle  
**T**           with centre  $O$  and radius 6 cm, where  
               $\angle AOB = 30^\circ$ .

Determine the exact value of the area of the triangle  $OAB$ .



NOT TO  
SCALE

$$\begin{aligned}\text{Area} &= \frac{1}{2}ab \sin C \\ &= \frac{1}{2} \times 6 \times 6 \times \sin 30^\circ \\ &= 9 \qquad \therefore \text{area is } 9 \text{ units}^2\end{aligned}$$

\* These solutions have been provided by [projectmaths](http://projectmaths.com.au) and are not supplied or endorsed by NESA.

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