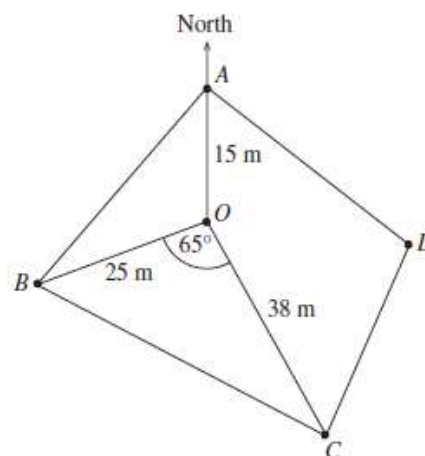


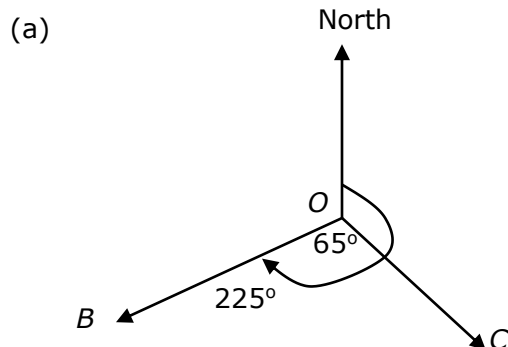
- SQ ME 24** The diagram shows the radial survey of a piece of land.
- (a) B is south west of O .
What is the true bearing of C from O ?
- (b) What is the area of $\triangle AOB$, to the nearest m^2 ?

DIAGRAM TO SCALE



2

3



(b) $\angle AOB = 360^\circ - 225^\circ$
 $= 135^\circ$
 Area $= \frac{1}{2} \times 15 \times 25 \times \sin 135^\circ$
 $= 132.5825215\dots$
 $= 133$ (nearest whole)
 \therefore the area is 133 m^2 .

If B is south west of O , then the bearing of B from O is $180^\circ + 45^\circ = 225^\circ$.

$$\begin{aligned} \text{Bearing of } C \text{ from } O &= 225^\circ - 65^\circ \\ &= 160^\circ \end{aligned}$$

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