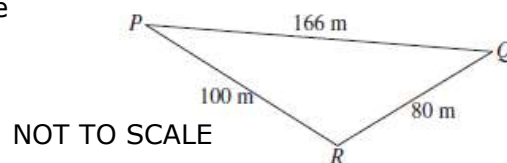




SQ ME Find the area of triangle PQR, correct to the
26 nearest square metre.



4

Let $\angle PRQ = \theta$.

Using cosine rule,

$$\cos \theta = \frac{100^2 + 80^2 - 166^2}{2(100)(80)}$$

$$= -0.69725$$

$$\theta = 134^\circ 12'$$

$$\text{Area} = \frac{1}{2} \times 100 \times 80 \times \sin 134^\circ 12'$$

$$= 2867.312156\dots$$

$$= 2867 \text{ (nearest whole)} \quad \therefore \text{the area is } 2867 \text{ m}^2.$$

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