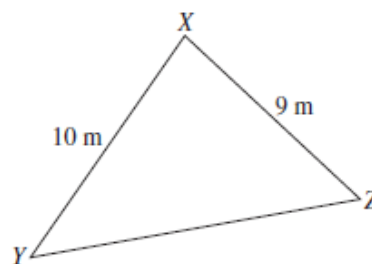


- SQ ME** The diagram shows triangle XYZ.
27 The area of the triangle 43 m^2 and $\angle YXZ$ is acute. What is the size of $\angle YXZ$, to the nearest degree?

3

NOT TO SCALE



Let $\angle YXZ = \theta$.

$$\text{Area} = \frac{1}{2} \times 10 \times 9 \times \sin \theta = 43$$

$$45 \sin \theta = 43$$

$$\sin \theta = \frac{43}{45}$$

$$\theta = \frac{43}{45}$$

$$= 72.85379$$

$$= 73 \text{ (nearest whole)} \quad \therefore \angle YXZ = 73^\circ.$$

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