




Air maths tuition

Interact, engage and perform

Sine rule (Finding an Angle)

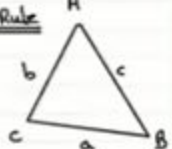
Sine Rule: Finding an angle in a triangle




9.8cm
8.2cm
70°
 θ

$$\frac{\sin \theta}{8.2} = \frac{\sin 70^\circ}{9.8}$$
$$\therefore \sin \theta = \frac{8.2 \times \sin 70^\circ}{9.8}$$
$$= 0.7862\dots$$
$$\therefore \theta = \sin^{-1} 0.7862\dots$$
$$= 51.838\dots^\circ$$
$$= 51.8^\circ (1 \text{ dp})$$

Sine Rule



$\frac{\sin A}{a} = \frac{\sin B}{b} = \frac{\sin C}{c}$



5.2m
4.8m
64°
 θ

$$\frac{\sin \theta}{5.2} = \frac{\sin 64^\circ}{4.8}$$
$$\therefore \sin \theta = \frac{5.2 \times \sin 64^\circ}{4.8}$$
$$= 0.9736\dots$$
$$\therefore \theta = \sin^{-1} 0.9736\dots$$

$$\therefore \theta = 76.828\dots$$
$$\therefore \theta = 76.8^\circ (1 \text{ dp})$$

With the acknowledgement of [Exam Solutions](#).
Find lots more revision sheets on [Air Maths Tuition](#).
[This Video](#)



Exam Solutions
m a t h s m a d e e a s y