

Area of a Triangle Using Sine *ramp up*

ANSWERS



a $PQ=7\text{ cm}$, $QR=9\text{ cm}$ and angle $PQR=48^\circ$. Find the area of PQR to 1 dp. 23.4 cm² $\frac{1}{2}ab \sin C$ without a diagram	b Find the area in cm² 6 cm² mixed units: convert first	c Which angle between sides of 5 cm and 7 cm gives the largest area? 90° the largest area: a right angle	d Which triangle has the larger area? Neither: the same $\sin \theta = \sin (180^\circ - \theta)$
e Find the area of the triangle to 1 dp 12.3 cm² two radii and the angle at the centre	f Find the area of the kite to 1 dp 37.6 cm² a kite: two equal triangles	g The area is 45 cm². Find x to 1 dp $x = 13.4\text{ cm}$ a side squared from the area	h Find the area to 1 dp 44.0 cm² a quadrilateral: two triangles
i Find x to 1 dp $x = 6.7\text{ cm}$ equal areas: an equation	j Find the area to 1 dp 59.4 cm² a regular polygon from its centre	k Find the area to 1 dp 22.6 cm² a second side by the sine rule	l Area 32 cm², θ acute. Find x to 1 dp $x = 8.2\text{ cm}$ an angle from the area, then a side

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