

Question	Scheme	Marks	AOs
1	$7 = \frac{1}{2} \times (6 - \sqrt{8}) \times h$	B1	1.1b
	$h = \frac{14}{6 - \sqrt{8}} \times \frac{6 + \sqrt{8}}{6 + \sqrt{8}}$	M1	3.1a
	$= \frac{84 + 14\sqrt{8}}{28} = \frac{84 + 28\sqrt{2}}{28} = 3 + \sqrt{2}$	A1	2.1
		(3)	

(3 marks)

Notes:

B1: A correct equation involving the area, h and the $(6 - \sqrt{8})$ e.g. $h = \frac{14}{6 - \sqrt{8}}$

Condone the omission of $h =$ if they have already rearranged, e.g. $(h =) \frac{7}{3 - \sqrt{2}}$

M1: A complete method to find h in a rationalised form.

May be for e.g. $2 \times \frac{7}{6 - \sqrt{8}} \times \frac{6 + \sqrt{8}}{6 + \sqrt{8}}$

Multiplication by any of $\frac{6 + \sqrt{8}}{6 + \sqrt{8}}$, $\frac{6 + 2\sqrt{2}}{6 + 2\sqrt{2}}$ or $\frac{3 + \sqrt{2}}{3 + \sqrt{2}}$ would be acceptable for rationalising.

A1: cso. Requires the rationalising of the denominator and simplification of the $\sqrt{8}$ to be seen.