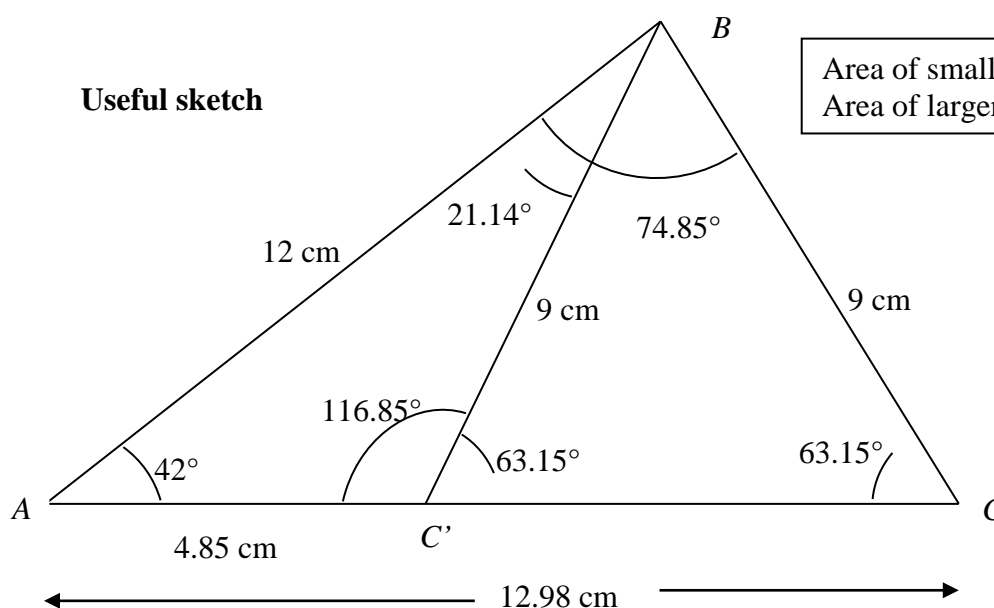


Question number	Scheme	Marks
3 (a)	$\frac{\sin C}{12} = \frac{\sin 42^\circ}{9}$ $C = 63.14...^\circ \quad 116.85^\circ$ $\angle ABC = 180 - ("C" + 42)$ $B = 180 - ("C" + 42), \quad B = 74.9^\circ \quad 21.1^\circ \text{ (Accept } 21.2^\circ)$	M1A1 A1 M1A1 [5]
(b)	$\text{Area} = \frac{1}{2} \times 12 \times 9 \sin "B", = \frac{1}{2} \times 12 \times 9 \sin 21.1^\circ$ $= 19 \text{ or } 20 \text{ (cm}^2\text{)}$	M1,A1 (smaller angle) A1

Total 8 marks**Notes**

(a)	M1	Uses Sine Rule either way around with correct values and achieves a value for an angle in degrees. (Not just the sine of the angle)
	A1	For either $C = 63.1^\circ - 63.2^\circ$ OR $C = 116.8^\circ - 116.9^\circ$
	A1	For $C = 63.1^\circ - 61.2^\circ$ AND $C = 116.8^\circ - 116.9^\circ$
	M1	For $\angle ABC = 180 - ("C" + 42)$ to achieve at least one value for $\angle ABC$
	A1	$\angle ABC = 74.9^\circ$ AND 21.1° both required rounded correctly (Accept 21.2°)
(b)	M1	For a correct expression for the area. They must use the appropriate angle with the correct lengths. For example; 9cm, 12 cm with their angle B (even if it is incorrect but identified as their angle B). If they do not have an angle B and use lengths 9 cm and 12cm, award M0. If they only have one value for angle B , allow this mark. isw extra attempts after a correct method seen.
	A1	For using 21.1° or 21.2° only
	A1	Area = 19 or 20 (cm ²) accept this for full marks even if area of 52 (cm ²) is seen as well.

Useful sketch

Area of smaller triangle $ABC' = 19 \text{ (cm}^2\text{)}$
Area of larger triangle $ABC = 52 \text{ (cm}^2\text{)}$

Rounding: Please read the notes carefully on rounding in General Guidance