

Question	Scheme	Mark	Notes
23 (a)	One term correct	2	M1 A1
23 (b)	$9x^2 - 30x$ $9x^2 - 30x = -25$ $9x^2 - 30x + 25 = 0$ $(3x - 5)^2 \quad (\text{Attempt to factorise c's quadratic})$ $x = \frac{5}{3} \quad \text{OR} \quad 1\frac{2}{3} \quad \text{OR} \quad 1.67$	4	M1 A1 M1 A1
24 (a)	$\frac{6}{\sin \angle ABC} = \frac{10}{\sin 50} \quad \text{oe}$ $\angle ABC = \sin^{-1}\left(\frac{6 \times \sin 50}{10}\right)$	3	M1 M1 A1 (DEP)
24 (b)	$\frac{AB}{\sin(180 - (50 + \angle ABC))} = \frac{10}{\sin 50}$ $AB = \frac{10 \times \sin(180 - (50 + \angle ABC))}{\sin 50}$ <p>(OR</p> $AB^2 = 6^2 + 10^2 - 2 \times 6 \times 10 \times \cos(180 - (50 + \angle ABC))$ $AB = \sqrt{((6^2 + 10^2) - (2 \times 6 \times 10 \times \cos(180 - (50 + \angle ABC))))}$ <p>)</p> $AB = 12.74 \rightarrow 12.7 \text{ (cm) awrt}$	3	M1 M1 (M1) (M1 (DEP)) (DEP))