

**YEAR 11 MATHEMATICS
MODULE 2**

1. Evaluate $\sqrt{1\frac{24}{25}}$.
2. Write $7\sqrt{2}$ in single surds form.
3. Simplify: $\sqrt{20} + \sqrt{45} + \sqrt{125} - 2\sqrt{80}$
4. Simplify: $(3\sqrt{2} - 1)(3\sqrt{2} + 1)$.
5. In a given triangle ABC, $\angle B = 39^\circ$, $\angle C = 82^\circ$, $a = 6.73\text{cm}$. Find c correct to 2 decimal places.
6. Find the values of θ lying between 0° and 360° for $\cos\theta = 0.2874$.
7. The bearing of B from A is 150° , what is the bearing of A from B?
8. In a given triangle ABC, $a = 6.7\text{cm}$, $c = 2.3$, $B = 46.6^\circ$. Find b correct to 1 decimal place.
9. Find the values of θ lying between 0° and 360° for $\tan\theta = -2.106$.
10. A point X is 34m due east of a point Y. The bearings of a flag pole from X and Y are $N18^\circ W$ and $N40^\circ E$ respectively. Calculate the distance of the flagpole from Y correct to 1 decimal place.

