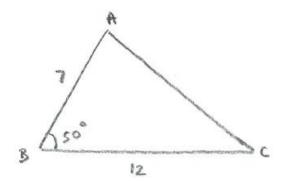
Trigonometry Q11 (30/6/23)

For the triangle below, what is the best strategy for finding angle *A*?



Solution

Although there is only one way of drawing the triangle, we want to avoid using sinA, as A is close to 90°

(and
$$sinx = sin (180^{\circ} - x)$$
)

But we could find C instead, and subtract B + C from 180°.

We can use the Cosine rule to find AC, and then the Sine rule to find C, and hence A.

Alternatively, having found AC, we could use the Cosine rule again to find A (there is never any ambiguity when using the Cosine rule).