Quiz 9

Use the Law of Sines or the Law of Cosines to find angle \( C \) (only). If two solutions exist, find both. If no solution exists, explain why not. Assume triangles are labeled in the standard way (angle \( A \) opposite side \( a \), etc.). Sketch and label a triangle for each solution, roughly to scale. Round your answers to the nearest degree. Justify your answers.

1. \( a = 8, \ b = 10, \ c = 3 \).

2. \( A = 60^\circ, \ a = 18, \ c = 20 \).