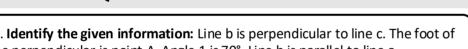
Rotation

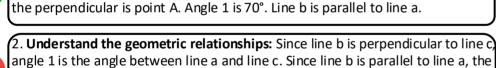
Question:

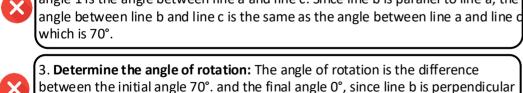
As shown in the figure, the straight line a and the straight line b are intercepted by the straight line c. Line b is perpendicular to c, and the foot of the perpendicular is

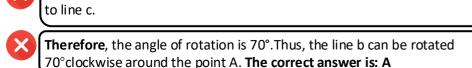
point A. $\angle 1 = 70^{\circ}$. If line b is parallel to line a, how many degrees clockwise can line b be rotated around point A? Choices: A: 70° B: 50° C: 30° D: 20°

Qwen2.5-VL-7B-Instruct

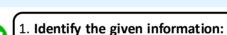


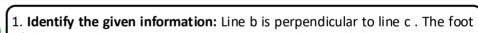


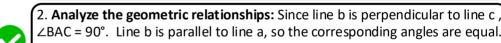




Ours







of the perpendicular is point A $. \angle 1 = 70^{\circ}$. Line b is parallel to line a.



 \angle BAC = 90°. Line b is parallel to line a, so the corresponding angles are equal. The angle $\angle 1$ is given as 70°.



3. Determine the rotation angle: - The angle ∠ 1 represents the angle



between line b and the vertical line c . Since line b is perpendicular to line c , the angle between line b and line a (which is parallel to line b) is 90° - 70° =



Therefore, the line b can be rotated 20° clockwise around the point A .The correct answer is D.