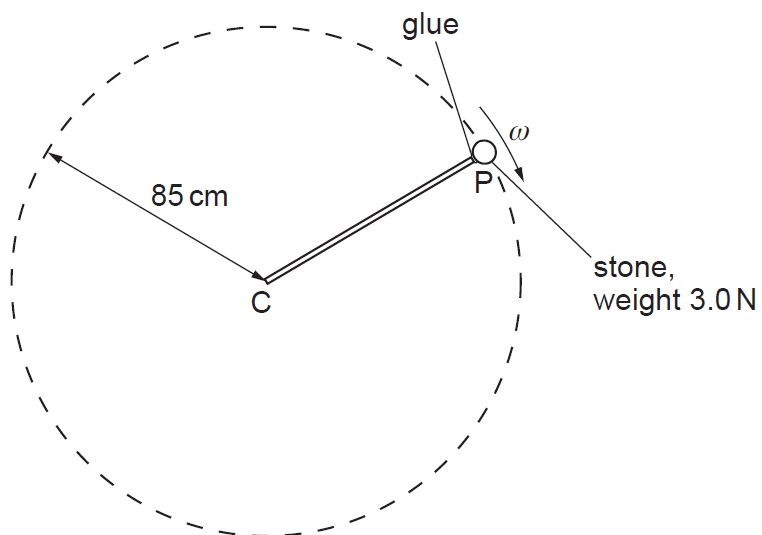


- 9 A stone of weight 3.0 N is fixed, using glue, to one end P of a rigid rod CP as shown in the diagram. The rod is rotated about end C so that the stone moves in a vertical circle of radius 85 cm.



The angular speed ω of the rod and stone is gradually increased from zero until the glue snaps when the tension in it is 18 N.

What is the angular speed of the stone?

- A** 2.4 rad s⁻¹ **B** 7.6 rad s⁻¹ **C** 9.0 rad s⁻¹ **D** 58 rad s⁻¹