

BA SANGAM COLLEGE
YEAR 13
TECHNICAL DRAWING
WORKSHEET 5

GIVEN:

Use the data given below to construct the performance graph and cam profile.

DATA:

Rotation: clockwise **Follower:** roller

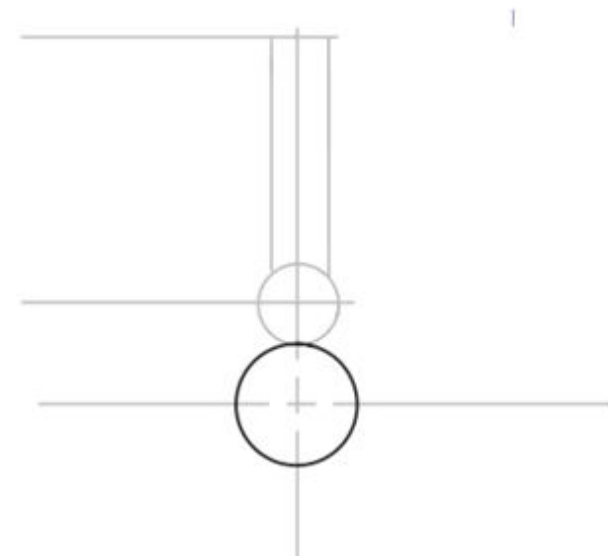
Performance required:

0°-180° - max lifts with simple harmonic motion

180°-225° - dwell

225°-360° - fall to start position with uniform velocity

NOTE: the length of the graph from 0 – 360 is 120mm, the height is 30mm and the distance of graph and profile is 60 mm

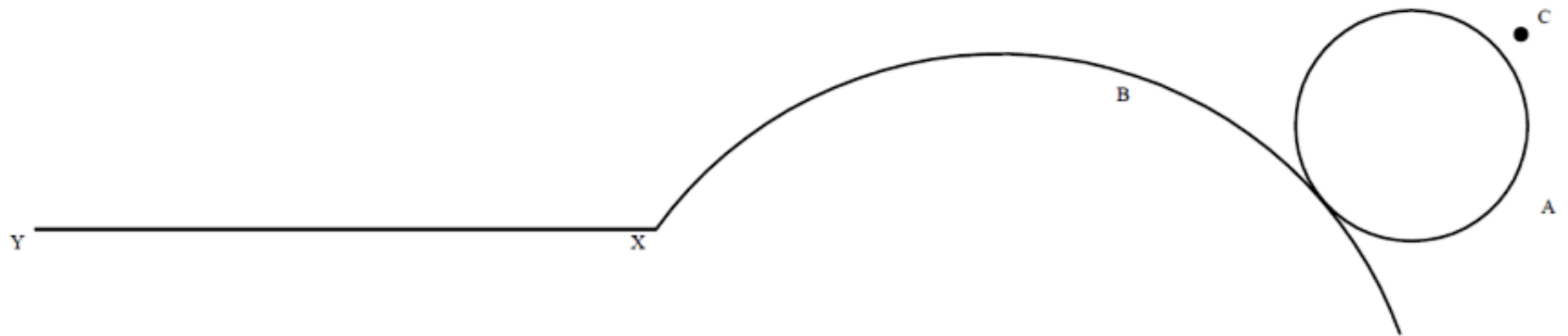


Given: Rolling circle **A**, base circle **B**, point **C** and base line **XY**.

Required: (i) Draw the locus of point **C** as circle **A** rolls down the base circle **B** for one complete revolution. (10 marks)

(ii) Continue the locus of point **C** as it rolls onto line **XY** for half a revolution. (5 marks)

NOTE: the radius of the small circle is 25mm the radius of the bigger circle(**C**) is 35mm and the radius of the arc is 120mm



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