

Answer on Question 48628, Physics, Mechanics — Kinematics — Dynamics A particle P is moving in a circle of radius r with uniform speed v. C is the centre of the circle and AB is diameter. The angular velocity of P about A and C is in the ratio 1. 4:1 2. 2:1 3. 1:2 4. 1:1

Solution

Constant value of magnitude of linear speed means, that angular velocity is also constant, because

$$\nu = \frac{v}{r}$$

Hence, answer is 4. 1:1