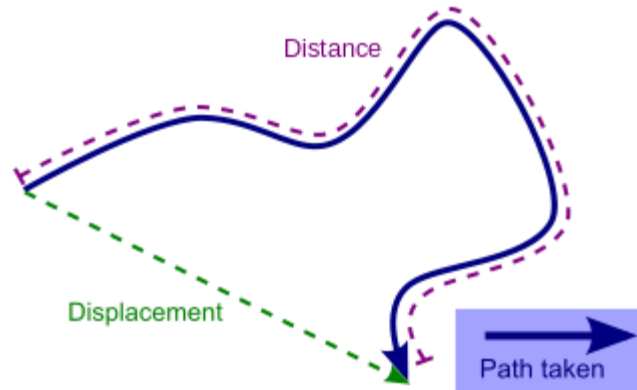


Answer on Question #53110, Physics / Mechanics | Kinematics | Dynamics

A body travels in circular path of radius 7 metre. Calculate distance travelled by the body for 1 complete revolution. Also find displacement.

Solution:



The distance traveled is equal circumference

$$d = 2\pi R = 2 * 3.14 * 7 = 43.96 \approx 44 \text{ m}$$

A displacement is the shortest distance from the initial to the final position of a body. In our case displacement is **zero**.

Answer: *distance* = 44 m; *displacement* = 0.