

Sangam SKM College -Nadi

Year 12

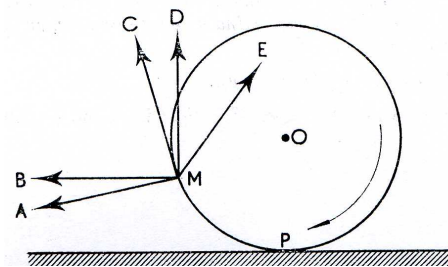
Physics

Worksheet 4

Questions

1. The diagram shows a wheel rolling without slipping along a horizontal road. A piece of mud on the rim becomes detached at M when the contact between the road and the wheel is at P. Which of the arrows A, B, C, D, E best shows the initial direction of the path followed by the detached particle?

- A. Arrow A
- B. Arrow B
- C. Arrow C
- D. Arrow D
- E. Arrow E



2. The diagram below shows a marble held at O on the path OPQR. When the marble is released it moves along the path and its direction is shown by the arrow. The segment of the path PQR is horizontal. The segment OPQR is assumed to be smooth. When the marble just passes Point P and to Point R, what can you say about its velocity from R to Q?

- A. It is zero
- B. It is constant
- C. Increase at constant rate
- D. Decrease at constant rate.
- E. It is non-uniform

