

Example: On a displacement-time graph, two straight lines make angles of 30° and 60° with the time-axis. The ratio of the velocities represented by them is

a) $1 : \sqrt{3}$

b) $1:3$

c) $\sqrt{3} : 1$

d) $3:1$

{ Hint: The velocity in a displacement-time is given by the slope of the curve. Slope = $\tan(\text{gent})$ of angle of inclination of s-t graph. This gives the respective ratios $\tan 30^\circ / \tan 60^\circ$

Answer: b) is the correct answer. }