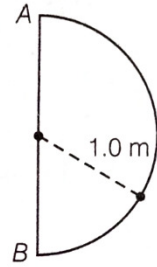In one second, a particle goes from point A to point B moving in a semicircle (Fig. 6.6). Find the magnitude of the average velocity.

Fig. 6.6

Solution

$$|\,\mathbf{v}_{av}\,| = \frac{AB}{\Delta t} \text{ m/s}$$

$$= \frac{2.0}{1.0} \text{ m/s} = 2 \text{ m/s}$$