

1. A particle travels along a circular path of radius 10 m . It completes one revolution in 20 s . Determine the speed with which the particle travels.
2. A point on the equator of the Earth travels along a circular path as the Earth spins about its axis. The radius of the earth is $6.38 \times 10^6\text{ m}$. Determine the speed of a point on the equator. What would happen to the speed if you consider another point away from the equator?
3. The Earth travels around the Sun in a circular orbit of radius $1.496 \times 10^{11}\text{ m}$. Determine the speed with which the Earth travels around the Sun.
4. A vehicle travels about a circular path of radius 100 m with a speed of 20 m/s . Determine the time for one revolution.
5. A particle moves in a circular orbit of radius 75 cm with a speed of 2 m/s . Determine the time period. Determine the distance traveled.

