

Answer all questions.

Section A: Definitions

Match the terms with the correct definitions.

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|--------------|---|---|---|
| Distance | • | • | Straight line distance between two points |
| Displacement | • | • | Rate of change of displacement |
| Speed | • | • | Rate of change of velocity |
| Velocity | • | • | Total length covered by a moving object |
| Acceleration | • | • | Rate of change of distance |

Section B: Application

Answer the following questions briefly.

1. A runner runs around a 400 m circular track and finishes at the starting point. What is the distance and displacement?

Distance: _____ m

Displacement: _____ m

2. A car travels 100 m north in 20 s. Calculate its average speed and average velocity.

Average speed: _____ m s^{-1}

Average velocity: _____ m s^{-1}

Section C: Quick Reflection

In one sentence, explain: Why is velocity different from speed?

Answer: