

Activity**Calculations of Motion**

Solve the following problems. Show all your work. Remember to include the correct units.

1. A jogger runs the first 1000 m of a race in 250 sec. What is the jogger's speed?
2. A Space Shuttle travels in orbit at 21,000 km/hr. How far will it travel after 5 hr?

Problems 3 and 4 refer to the table, which summarizes Jack's ride on his new skateboard.

Time (sec)	Distance (m)
0	0
5	30
10	70
15	90
20	120

3. What was Jack's speed from $T = 5$ sec to $T = 10$ sec?
4. What was Jack's average speed for the entire ride?
5. A car accelerates from 0 to 72 km/hour in 8 sec. What is the car's acceleration?