



Calculating Average Speed

Question

It is now 8:29 am, but when the bell rings at 8:30 am Tom will be late for Science class for the third time this week. He must get from one side of the school to the other by hurrying down three different hallways.

He runs down the first hallway, a distance of 35.0 m, at a speed of 3.50 m/s (meter per seconds).

The second hallway is filled with students, and he covers its 48.0 m length at an average speed of 1.20 m/s. The final hallway is empty, and Tom runs its 60.0 m length at a speed of 5.00 m/s.

- What is Tom's average speed in the first Hallway?
- What is Tom's average speed in the second Hallway?
- What is Tom's average speed in the third Hallway?
- Determine if Tom makes it to class on time by finding how many seconds he arrives before or after the bell.
- Draw a distance vs. time graph of his motion.

