



Problem of the Week

Problem B and Solution

Will That be Rye or Honey Oats?

Problem

Jagheet drives from his house to his cottage, 75 km away, maintaining an average speed of 60 km/h.

- How long, in minutes, does it take him to drive to his cottage?
- If he left his house at 11:37 a.m., at what time could he expect to arrive at his cottage?
- Realizing that he forgot to get bread, he stops at the grocery store for 12 minutes. Including this time, what is his new average speed in km/h? (Round your answer to the nearest tenth.)



Solution

- Since Jagheet travels 75 km at 60 km/h, his travel time will be $75 \div 60 = 1.25$ h, or $1.25 \times 60 = 75$ minutes.
ALTERNATIVELY: His speed is 60 km/h, or 1 km/min. So, 75 km takes 75 minutes.
- He would expect to arrive at his cottage 1 h and 15 minutes after 11:37 a.m., which would be at 12:52 p.m.
- His total time is now $75 + 12 = 87$ minutes. Thus his average speed is now $75 \div 87 \approx 0.862$ km/min, or $0.862 \times 60 \approx 51.7$ km/h, to the nearest tenth.

