Mathematics

Displacement-time graphs I Lesson 7 of 8

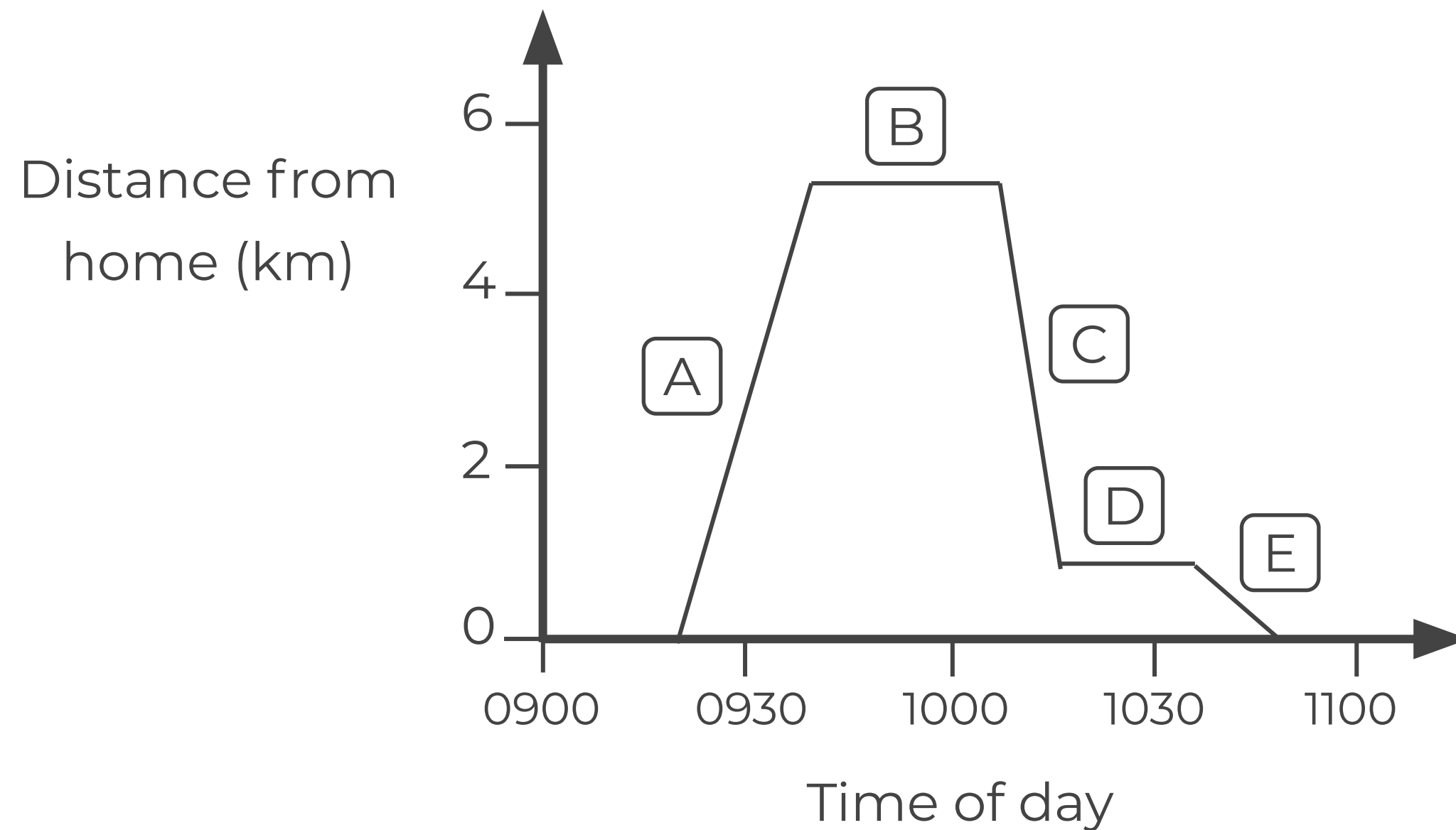## Downloadable resource

Miss Kidd-Rossiter

Try this

This graph shows the distance Xavier is from home throughout a day.
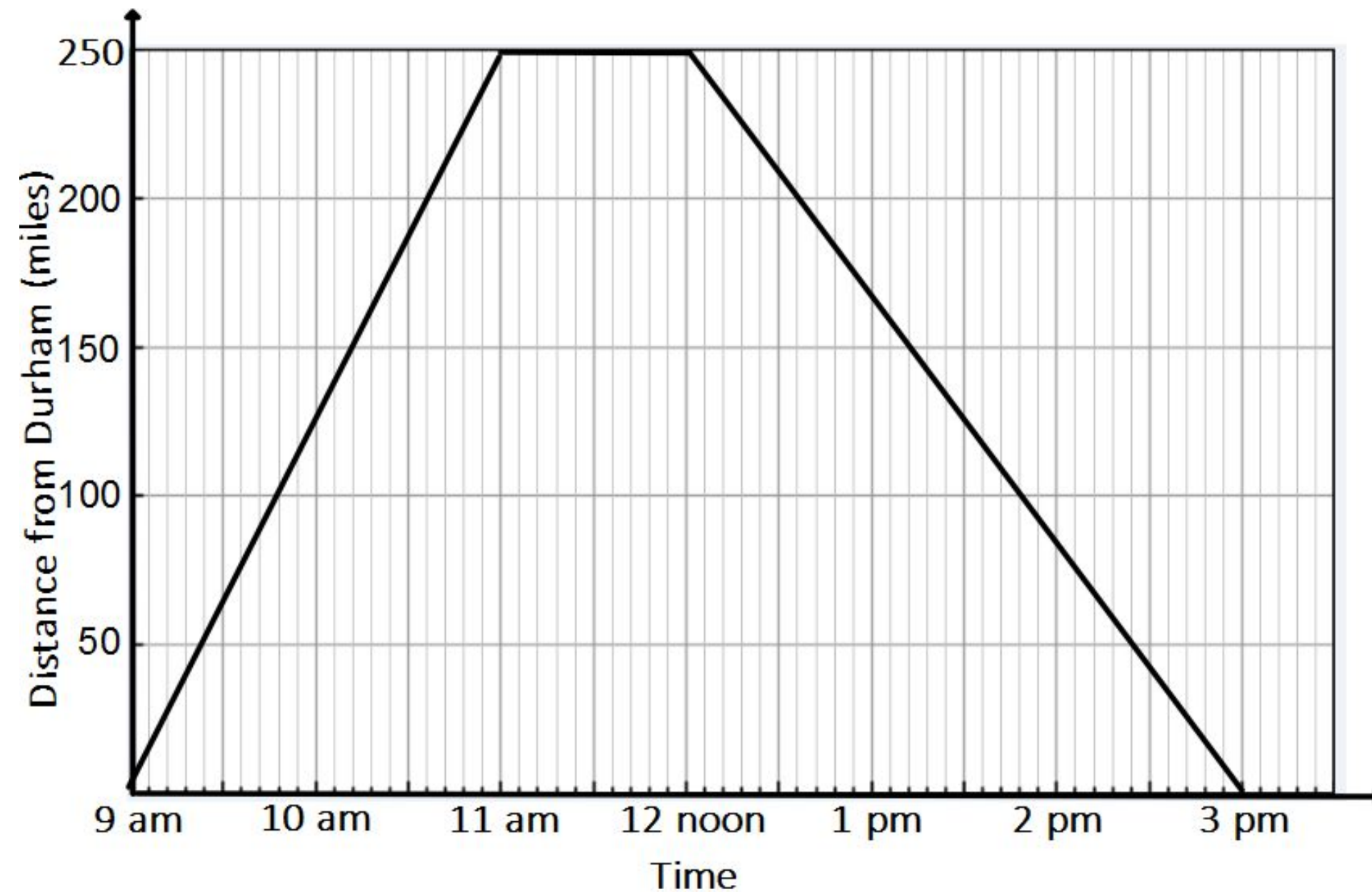

Compare what is happening at each of the marked segments.

What could Xavier be doing?

Connect

The distance – time graph shows the journey of a man from Durham to Edinburgh, and back.
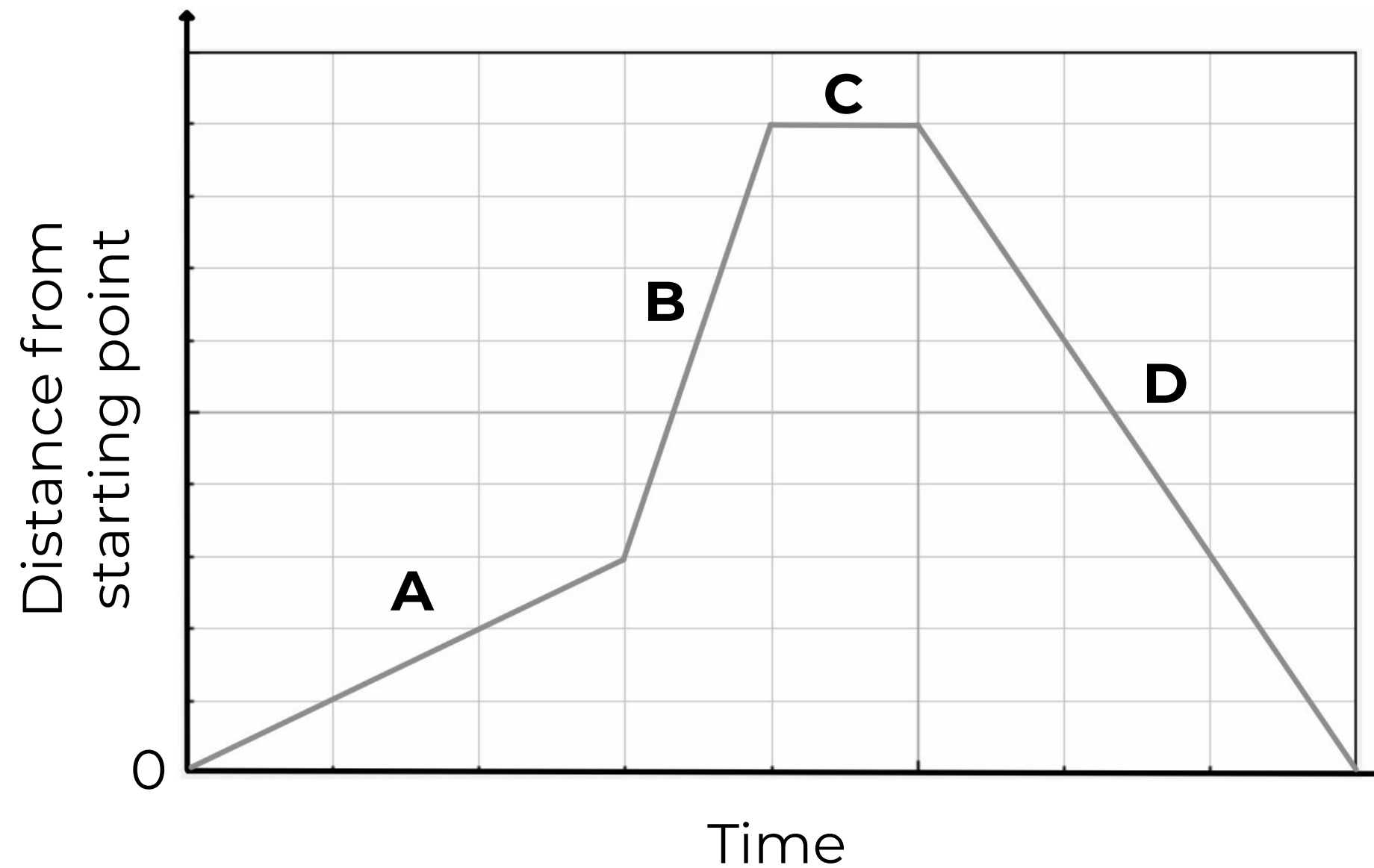

a) How far is the journey from Durham to Edinburgh?

b) How long did the man stop in Edinburgh?

c) Did he travel at a faster speed going to Edinburgh or on the return journey?

Explain your answers.

Independent task

Label the distance-time graph, give reasons for your answers.

Moving at constant speed towards the starting point
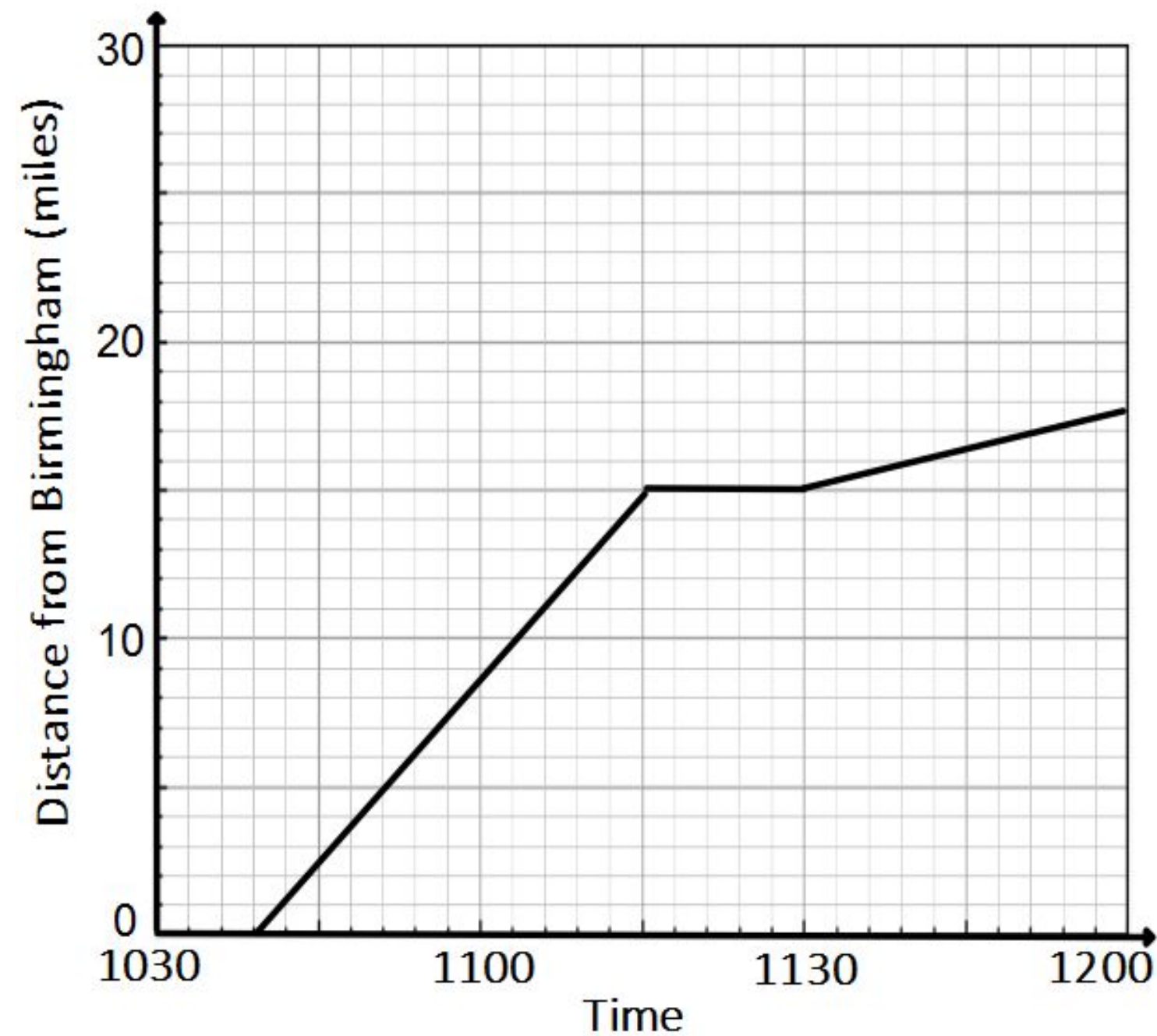
Not moving

Moving rapidly away from the starting point at constant speed

Moving slowly at constant speed

Independent task

The graph represents a journey of a cyclist from Birmingham to Coventry.

a. What time did the cyclist leave Birmingham?

b. The cyclist arrived in Coventry at 1200.

How far is Coventry from Birmingham?

c. The cyclist made one stop on his journey.

i. At what time did the cyclist stop?

ii. How far was the cyclist from Coventry when he stopped?

Independent task

Write your own story for these graphs
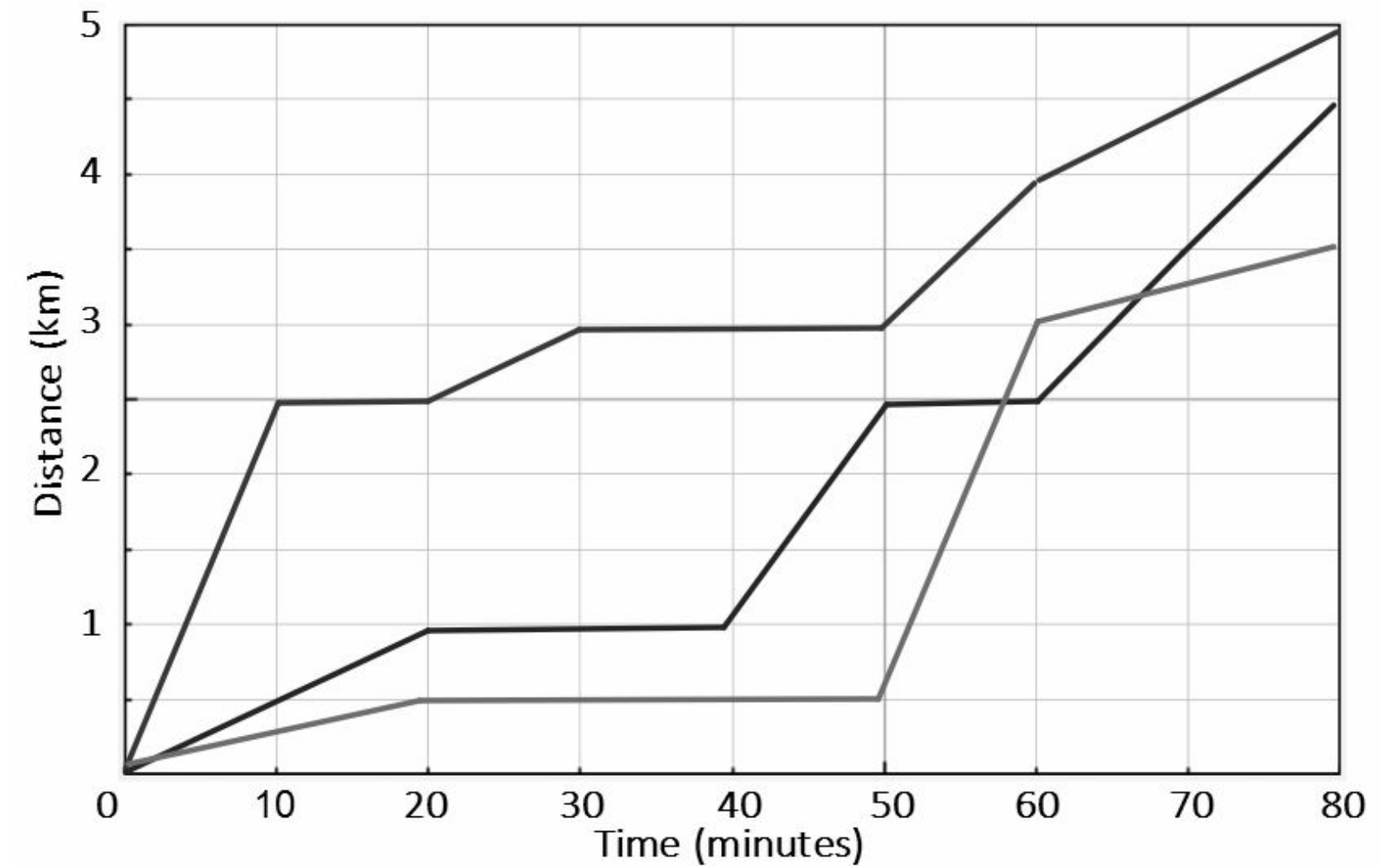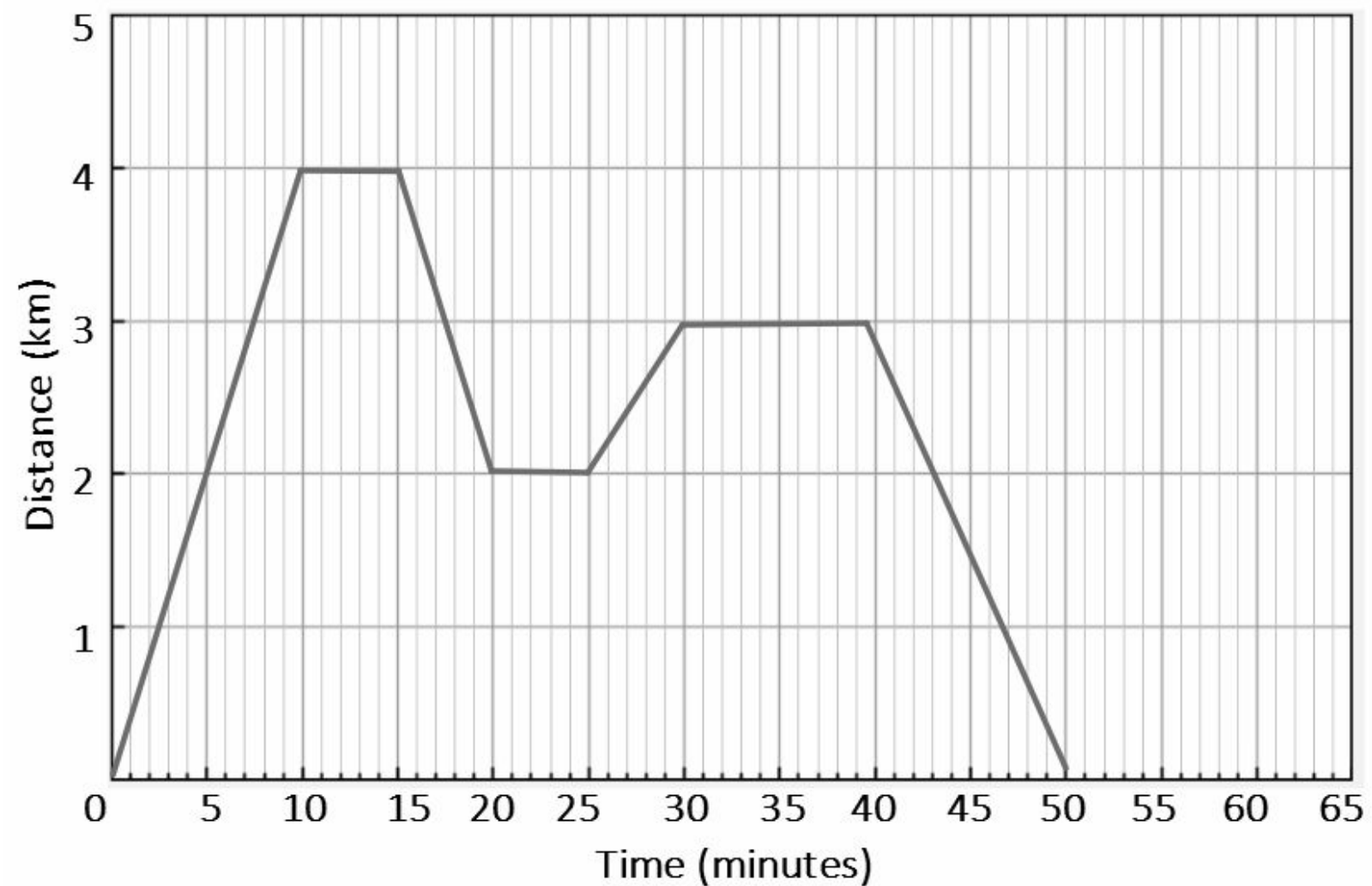
Explore

These displacement-time graphs show the journeys of two different cars.

Which is more realistic? Why?