Interpretation of Statistics

How to deal with the information provided? (Continued)

Pursing Pictures!

PROBLEM:

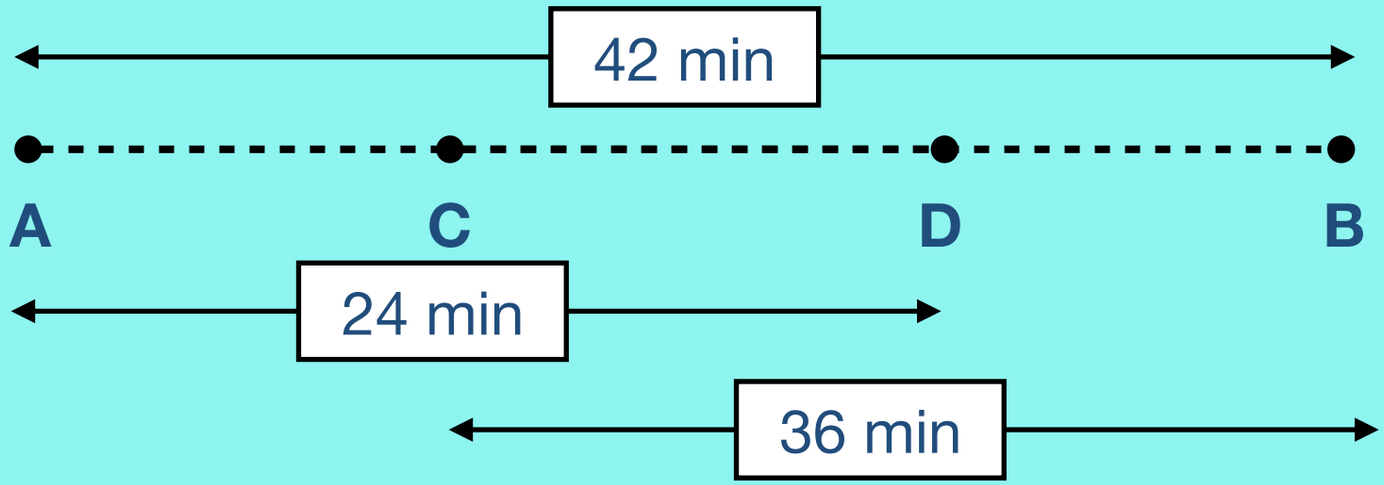
There is one railway on an island, which runs from station A to station B. There are two intermediate stops at town C and town D. The trains run continuously from one end to the other at a constant speed, stopping for three minutes at each station. From departing station A to arriving at station B takes 42 minutes. From station A to town D takes 24 minutes. From town C to station B takes 36 minutes.

How long does it take from town C to town D?

HINT:

The statement has too much information to restore all of it at the same time.

A picture makes this problem much easier!



Now can you solve the problem?

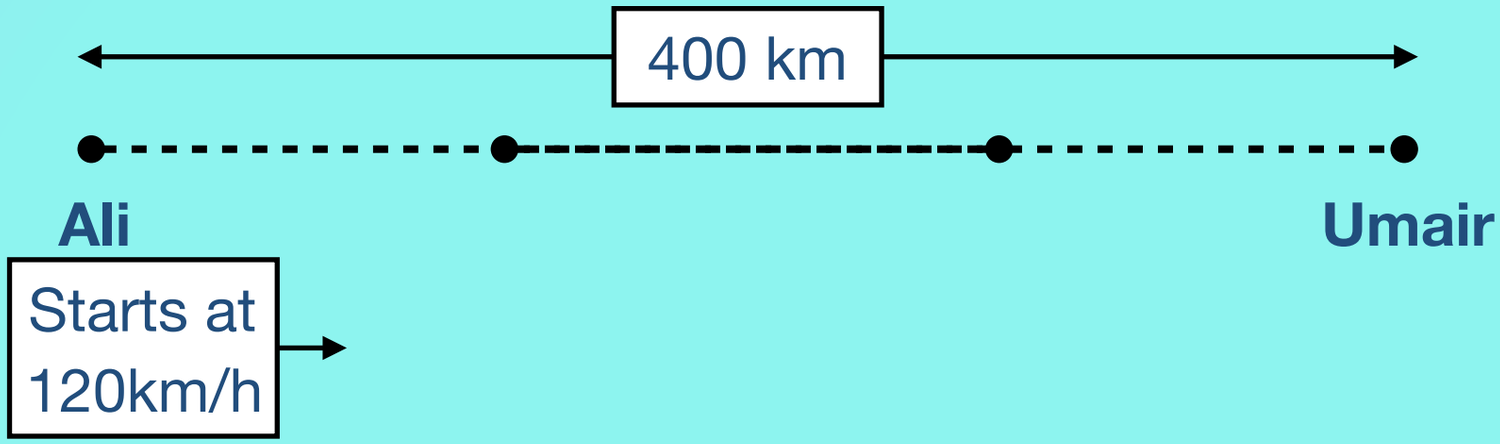
PROBLEM:

Now can you solve this problem?

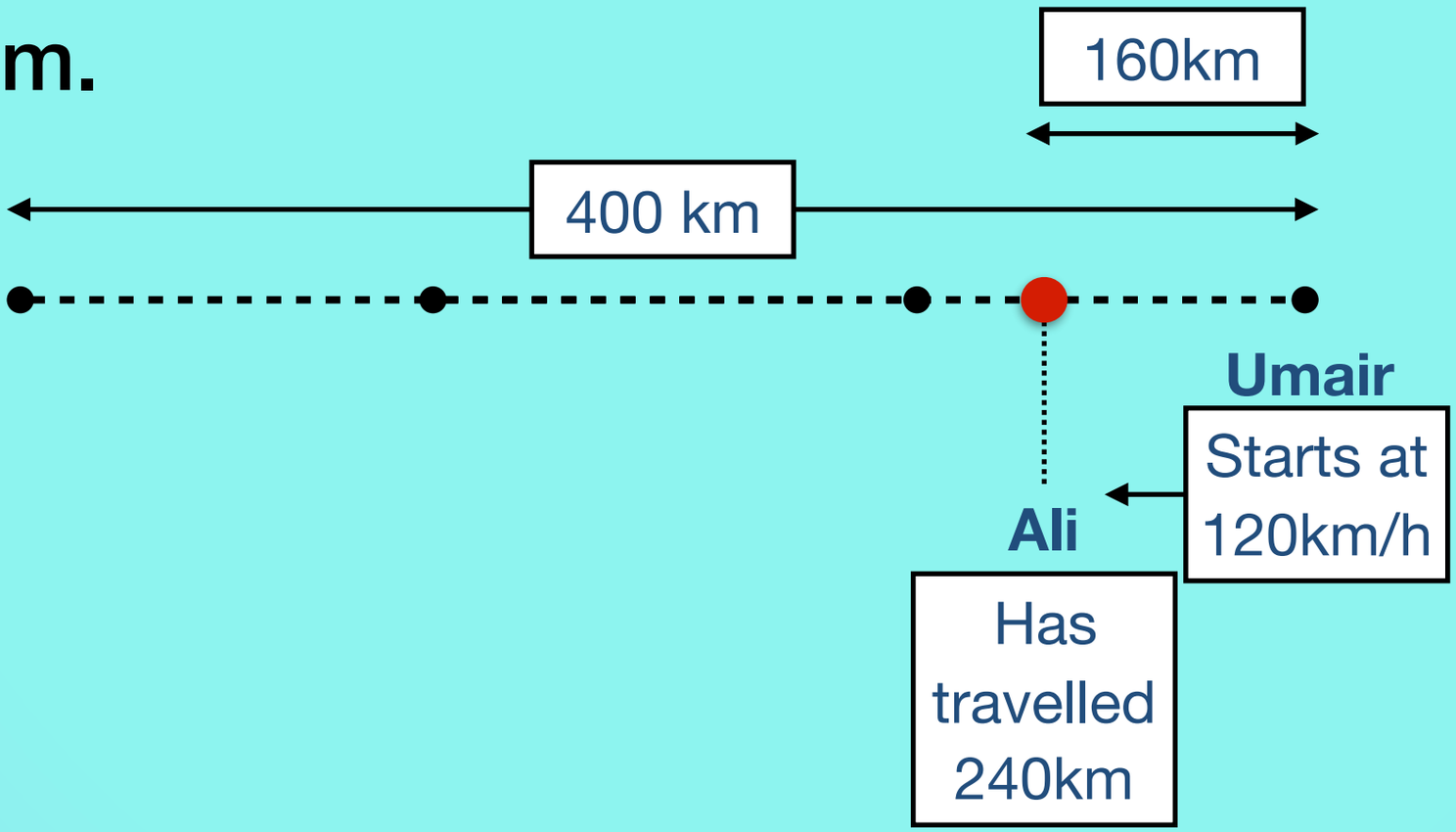
Ali and Umair are brothers and live 400 km apart. They are going to have a week's holiday by exchanging houses. On the day they are starting there holiday, Ali leaves home at 8:00a.m. and Umair at 10:00a.m. They both drive at 120km/h on a motorway that travels directly between their homes. At what time do they pass each other on the road?

SOLUTION:

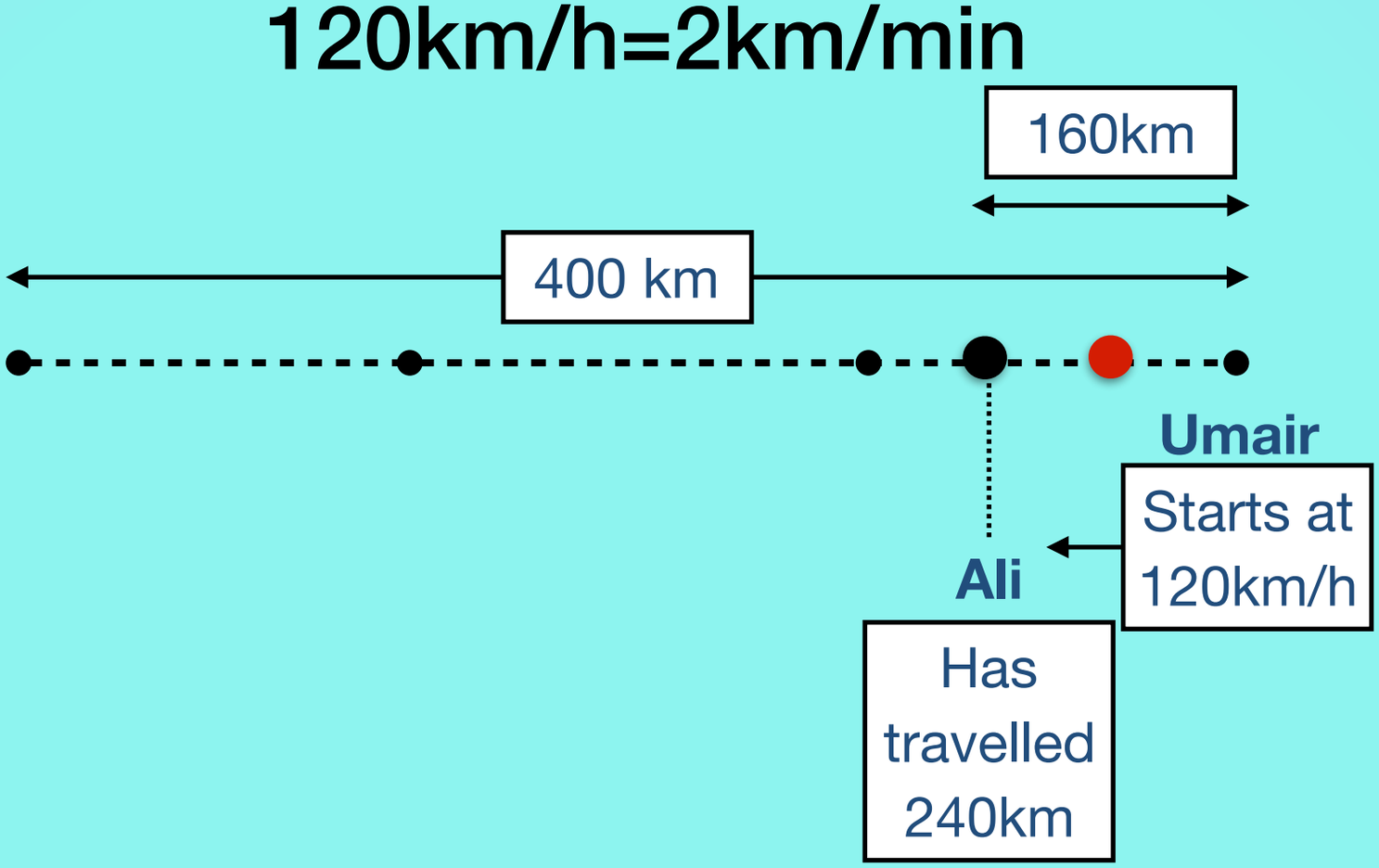
At 08:00a.m.



At 10:00a.m.



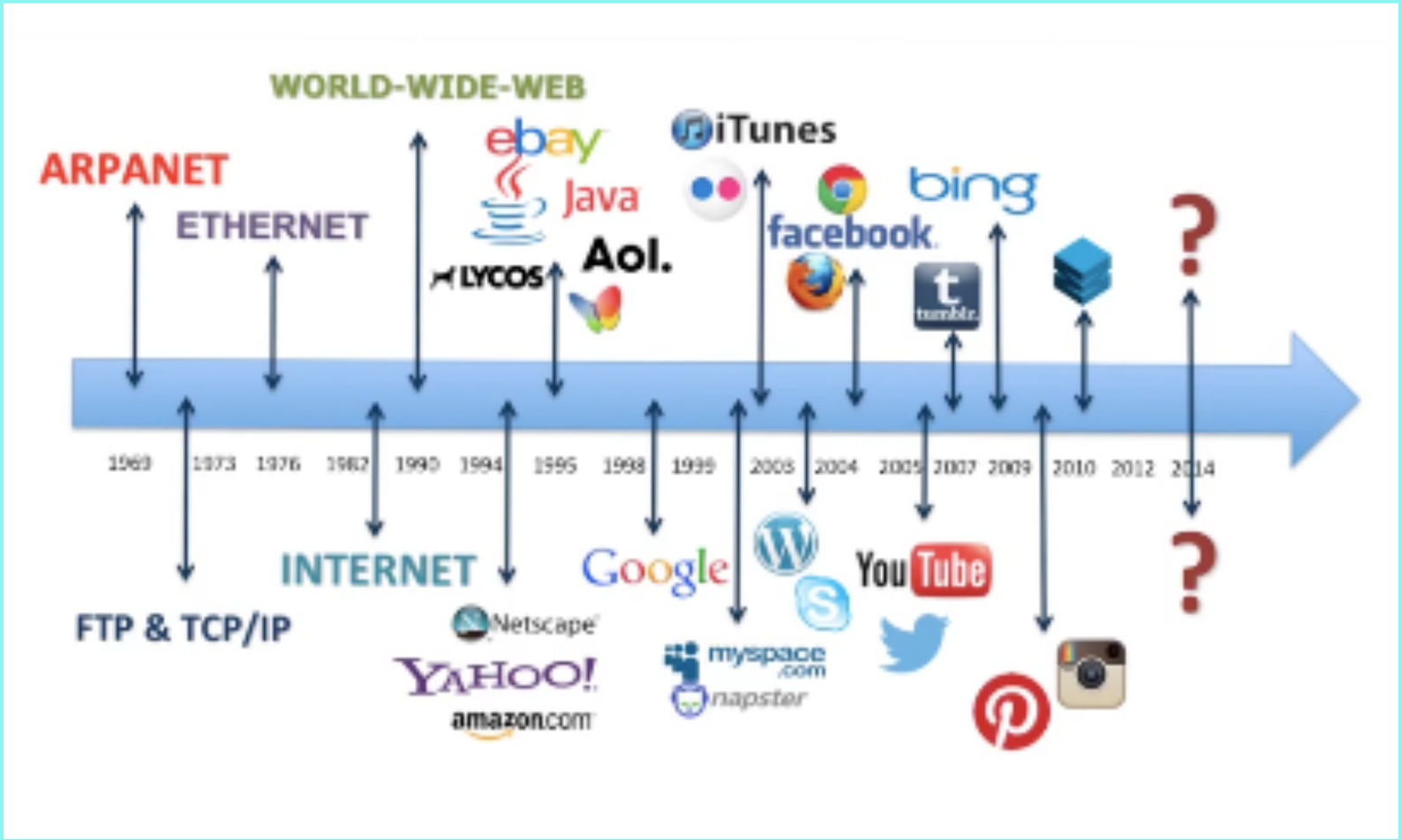
SOLUTION:



They will meet at the midpoint of the remaining journey.
The midpoint is at 80km/h.
It will take 40 minutes for each of them to travel 80km.
Thus they will pass each other at 10:40a.m.

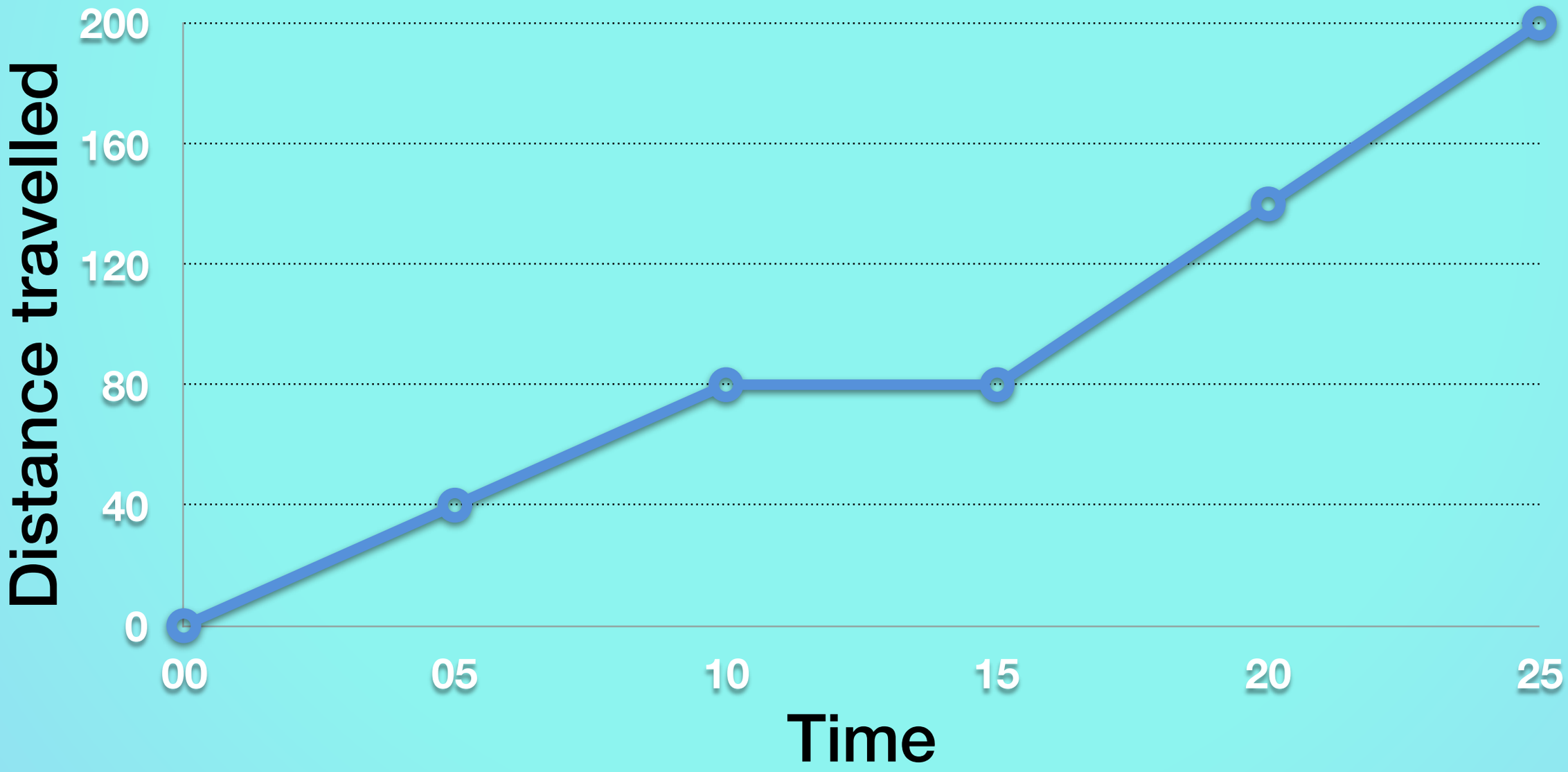
Grasping Graphs!

The following graph shows how internet evolved over time!

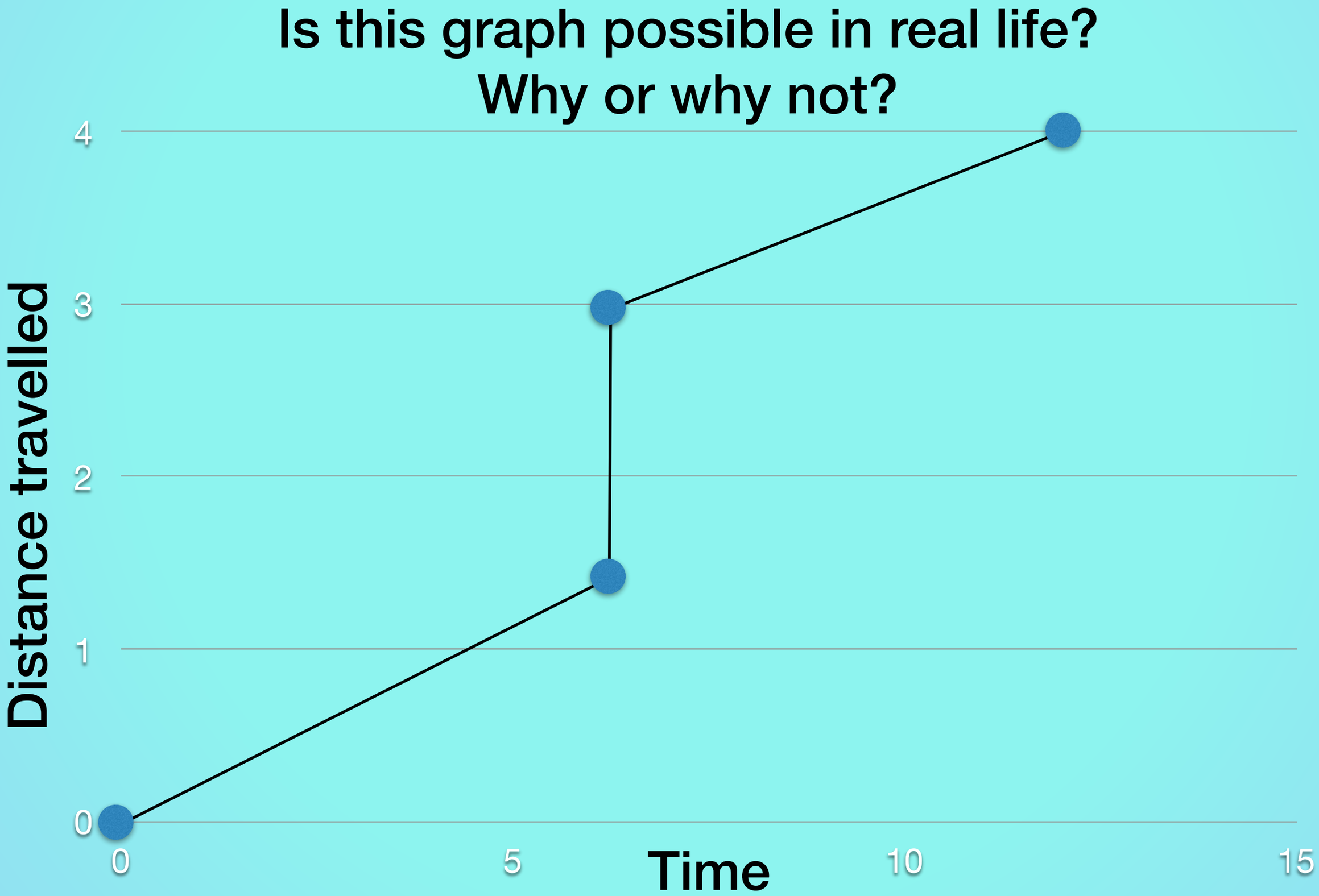


PROBLEM:

Ali is getting late for work. He decides to skip breakfast and save time. “I’ll grab a coffee on my way,” he thinks. Looking at the graph below, can you determine whether or not he stopped for coffee?



PROBLEM:

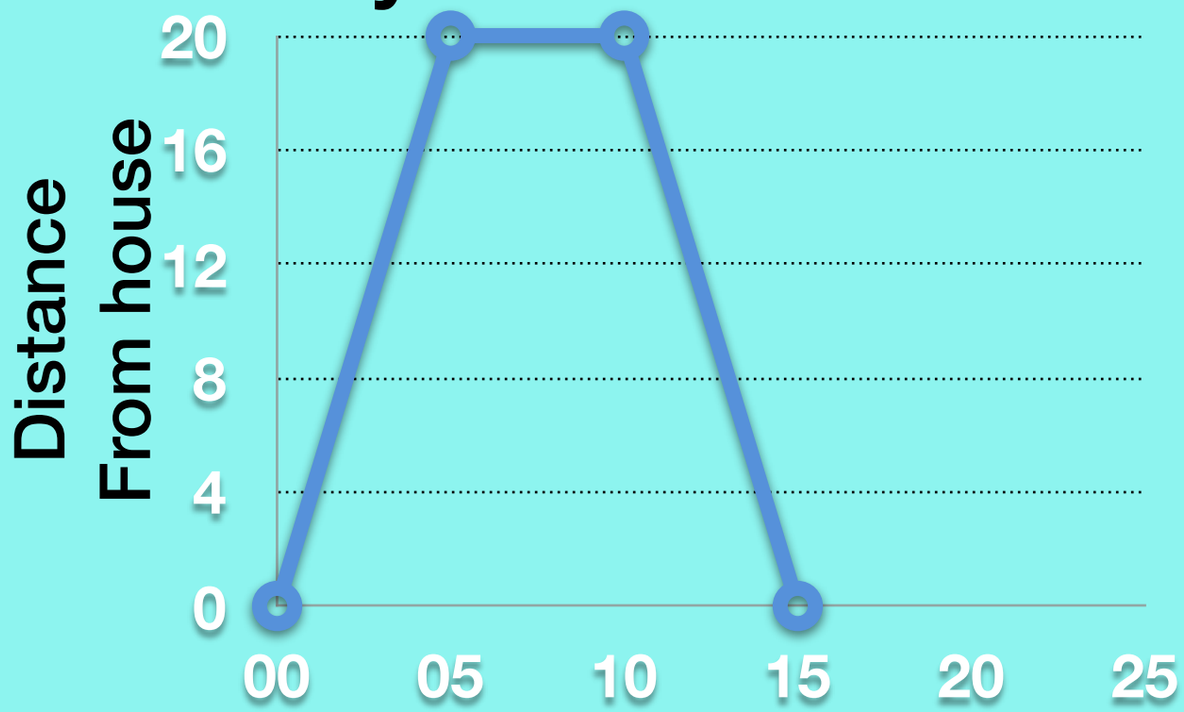

Is this graph possible in real life?
Why or why not?
Distance travelled
4
3
2
1
0
0
5
10
15
Time

PROBLEM:

Is this graph possible in real life?
Why or why not?

PROBLEM:

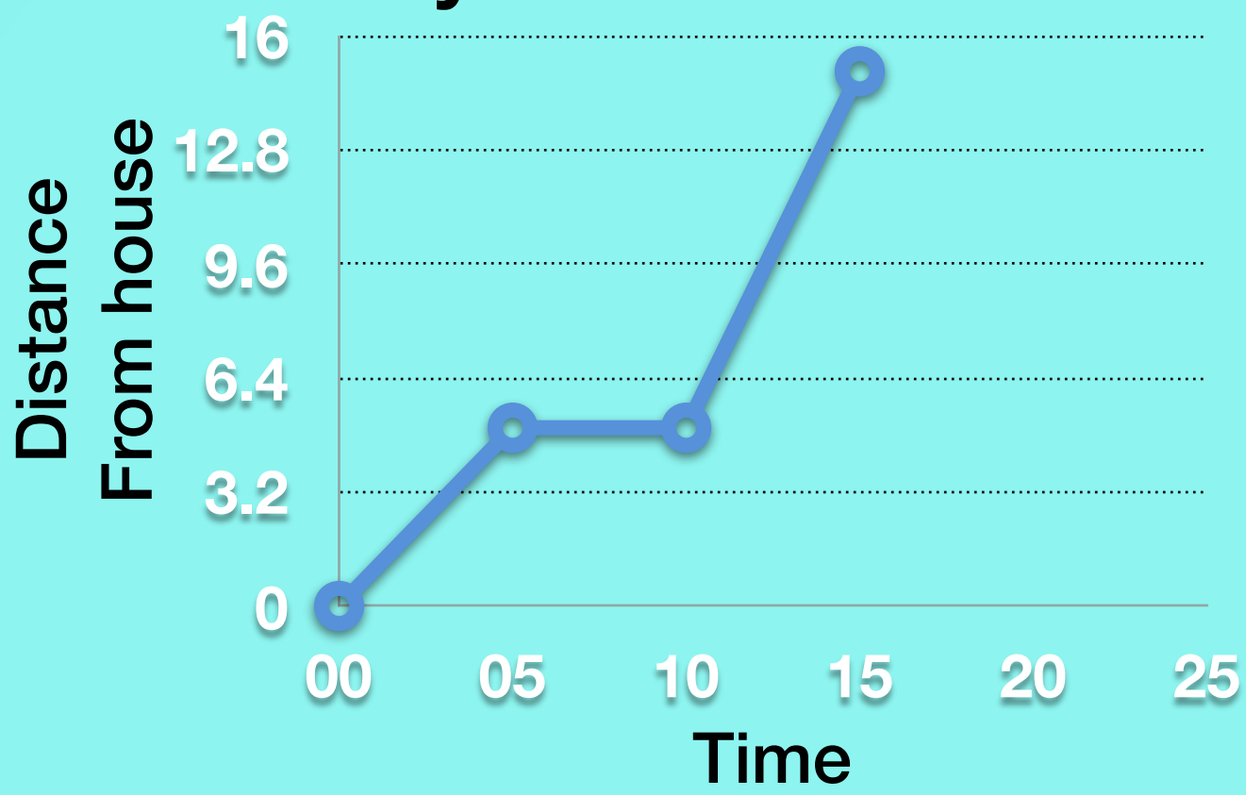
Select a story which matches this graph.



- Aslam ran to school and waited for his class to start. Someone told him that there will be no class so he ran back home.
- Adnan is going home. On his way, his boss called him to come to the office urgently, so he went to the office.
- Raza went to the bazaar and had lunch. After lunch he went to his office.

PROBLEM:

Select a story which matches this graph.

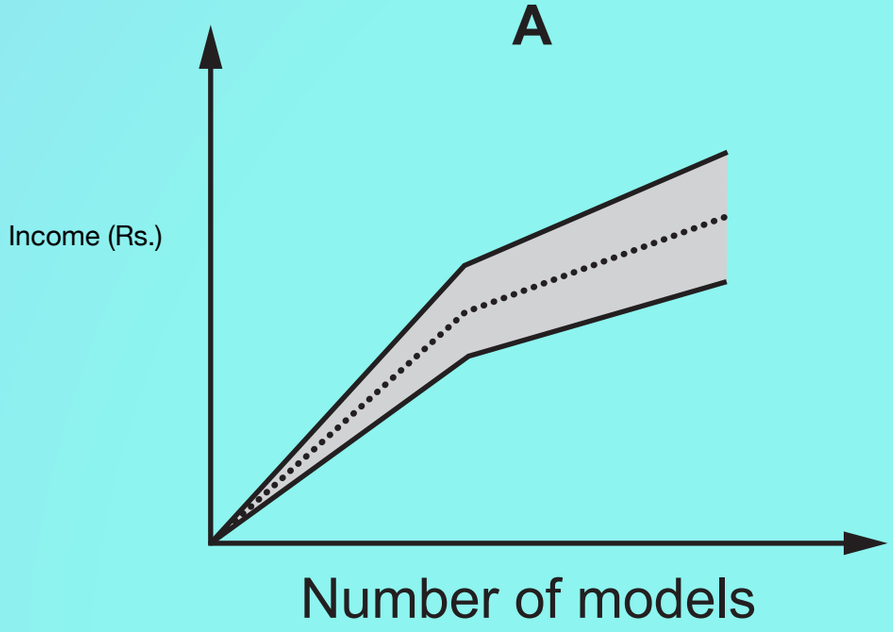


- Aslam ran to school and waited for his class to start. Someone told him that there will be no class so he ran back home.
- Raza went to the bazaar and had lunch. After lunch he went to his office.
- This graph is not possible.

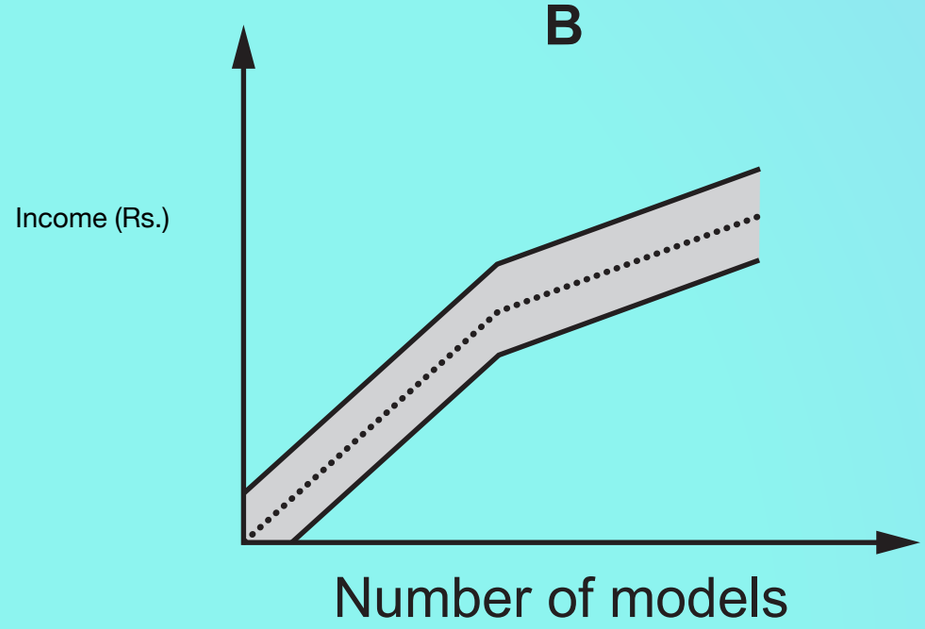
PROBLEM:

The tourism office decided that guide price of souvenirs of downhill should be Rs. 25 per model for the first 100 models, and Rs. 10 per model thereafter. The companies are allowed to vary their prices by up to 20% above or below the guide price. In with one of the following graphs does the shaded region represent the range of incomes that the companies can expect to receive for the models?

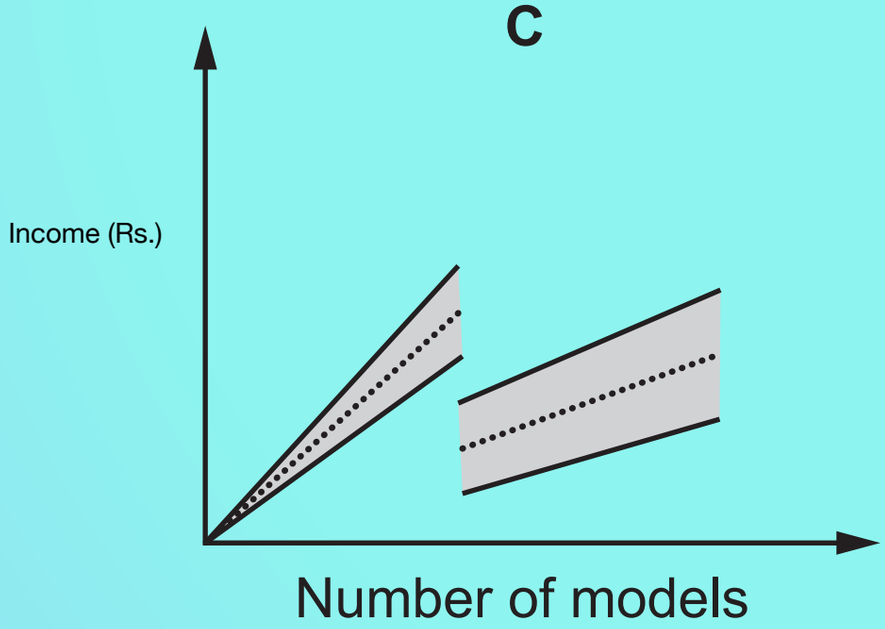
A


Income (Rs.)
Number of models

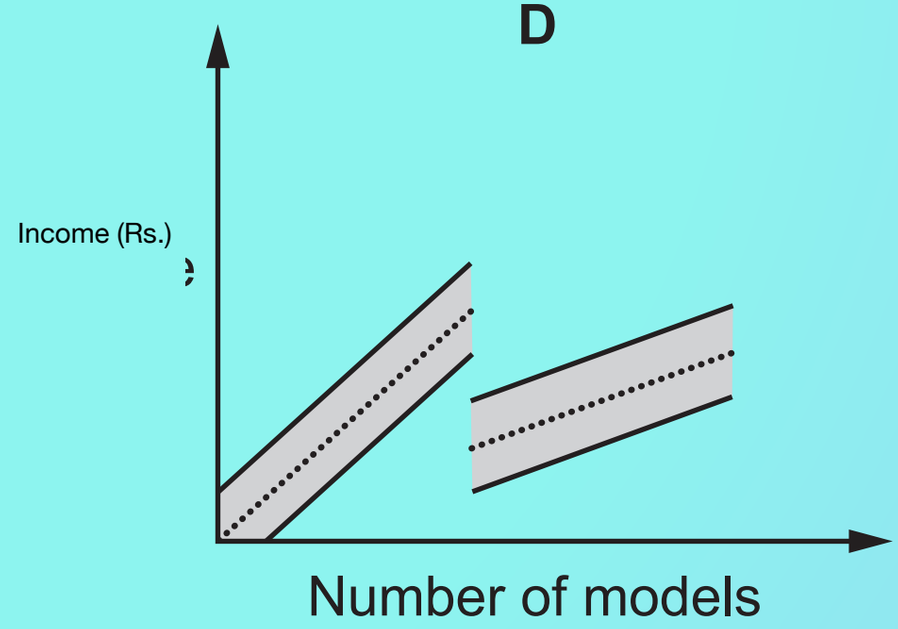
B


Income (Rs.)
Number of models

C


Income (Rs.)
Number of models

D


Income (Rs.)
Number of models

4

3

2

1

0

Jan