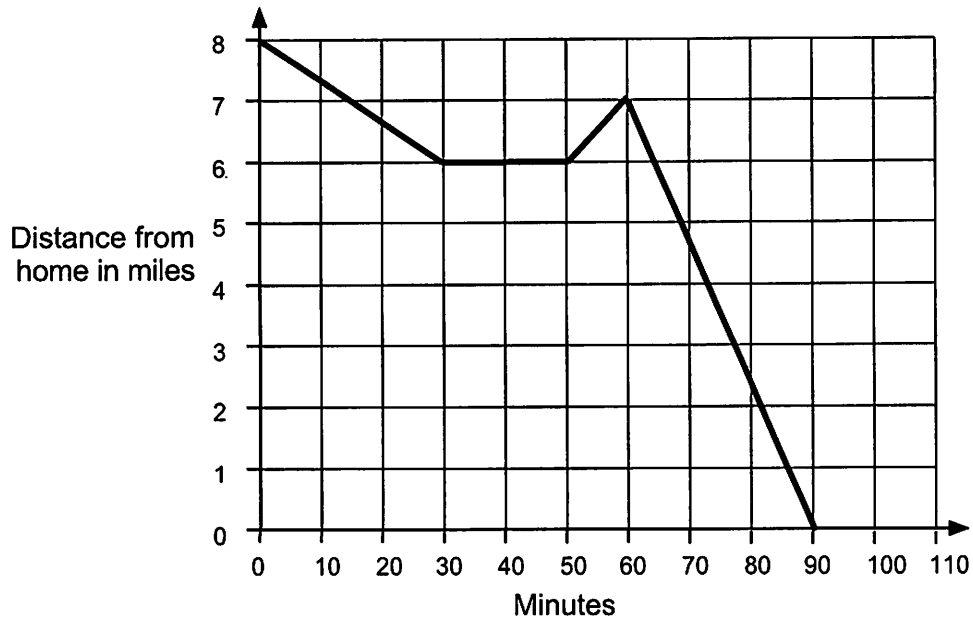


Journey Home

Sylvia bikes home along a straight road from her friend's house, a distance of 8 miles. The graph shows her journey.



1. Describe what may have happened. You should include details like how fast she bikes.

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2. Are all sections of the graph realistic? Fully explain your answer.

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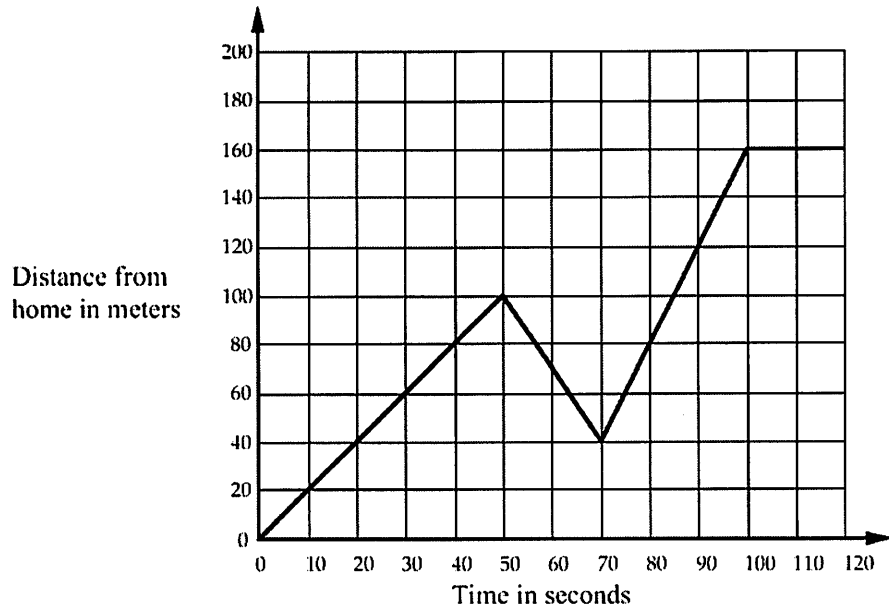
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Journey to the Bus Stop

Every morning Tom walks along a straight road from his home to a bus stop, a distance of 160 meters. The graph shows his journey on one particular day.



1. Describe what may have happened. You should include details like how fast he walked.

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2. Are all sections of the graph realistic? Fully explain your answer.

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Sketch a graph of the situations. Be sure to include appropriate scales and labels.

1. Darryl lives on the third floor of his apartment building. His bike is locked up outside on the ground floor. At 3 pm, he leaves to go run errands. At 3:02, as he is walking down the stairs, he realizes he forgot his wallet. He goes back up the stairs, retrieves the wallet at 3:04, and then leaves again. As he tries to unlock his bike, he realizes that he forgot his keys. Now it's 3:07 and one last time, he goes back up the stairs to get his keys. He returns back to ground floor and unlocks his bike. he is on his way at 3:10 pm.

2. Julie gets into an airplane and waits on the tarmac for 2 minutes before it takes off. The airplane climbs to 10,000 feet over the next 15 minutes. After 2 minutes at that constant elevation, Julie jumps and free falls for 45 seconds until she reaches a height of 5,000 feet. Deploying her chute, she slowly glides back to Earth over the next 7 minutes where she lands gently on the ground.

Journey Home

Sylvia bikes home along a straight road from her friend's house, a distance of 8 miles. The graph shows her journey.



- Describe what may have happened. You should include details like how fast she bikes.

Sylvia starts at her friend's house and travels at a ^{constant} speed of 4 miles/hour back toward home. She then stops for a period of 20 minutes before turning around, traveling away from home for 10 minutes. During this time she travels at a constant speed of 6 miles/hour. An hour into her trip she immediately turns around and bikes toward home. She arrives 30 minutes later after travelling 14 miles/hour.

- ✗ Are all sections of the graph realistic? Fully explain your answer.

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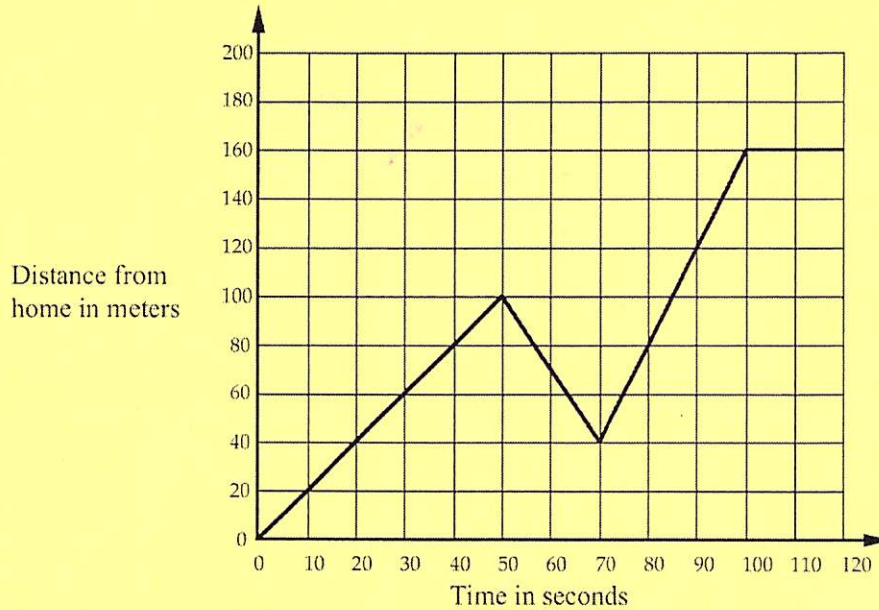
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Journey to the Bus Stop

Every morning Tom walks along a straight road from his home to a bus stop, a distance of 160 meters. The graph shows his journey on one particular day.



1. Describe what may have happened. You should include details like how fast he walked.

Tom begins walking away from his home at a rate of 2 meters/sec. He then stops, turns around and walks 60 meters back toward his house a little quicker than before. Realizing he had what he forgot he runs to the bus stop at a rate of 4 meters/sec. He gets there and waits for the bus for 20 seconds.

2. Are all sections of the graph realistic? Fully explain your answer.

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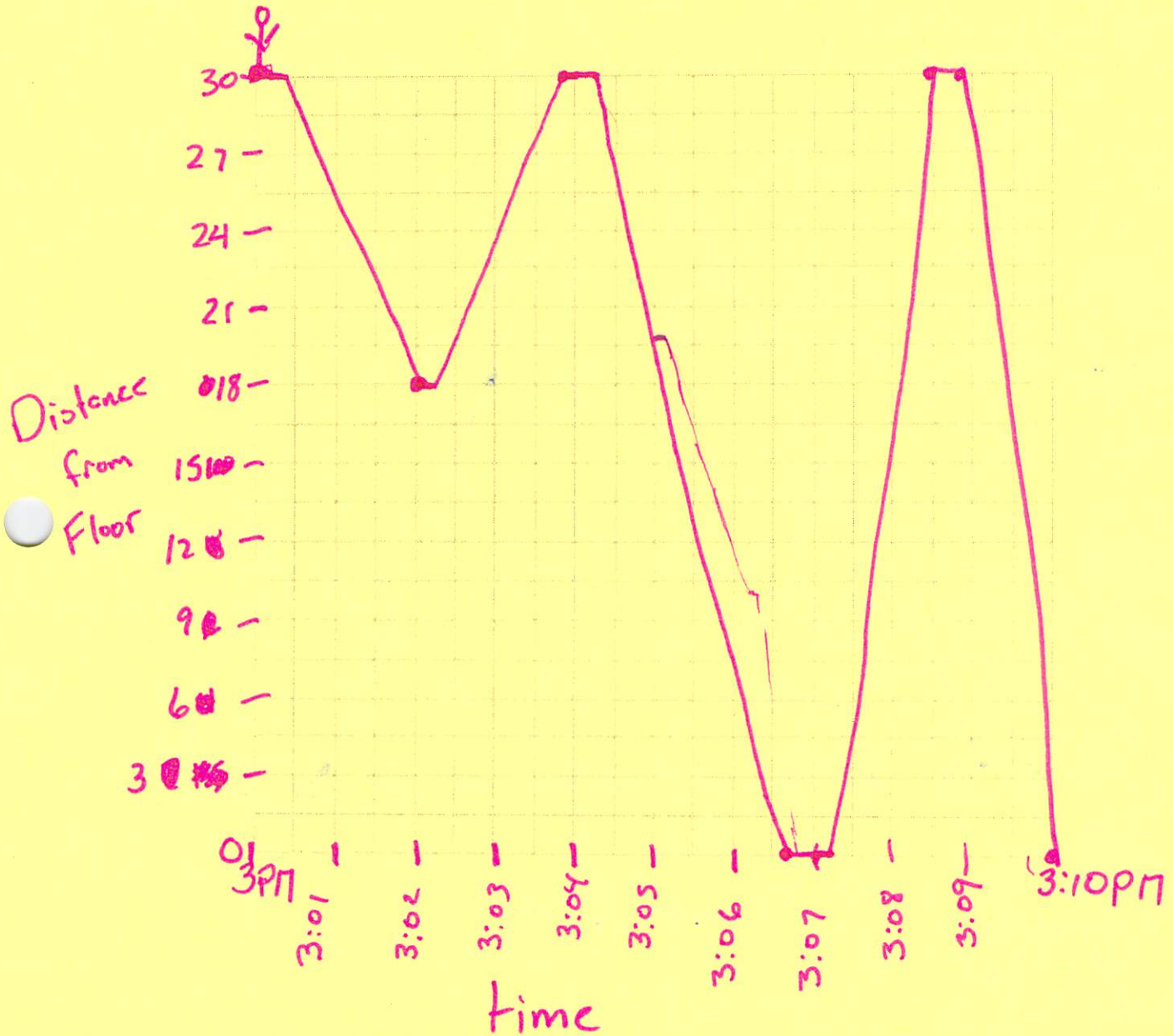
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