Journey

T1

This problem gives you the chance to:
• draw and interpret a graph of speed, distance and time

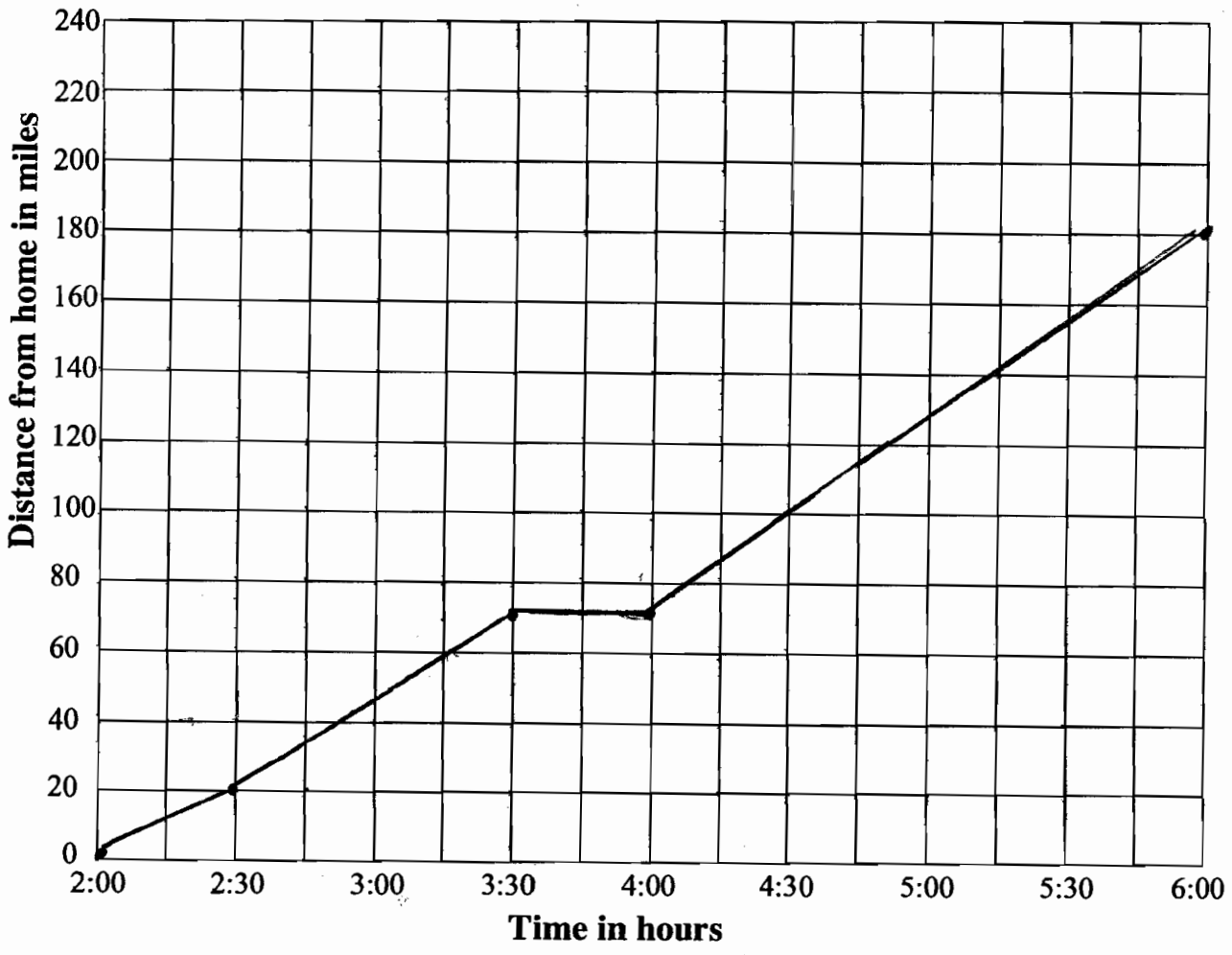
Here is a description of a car journey.

> "I left home at 2:00 hours. I traveled for half an hour at forty miles an hour, then for an hour at fifty miles an hour. I had a half hour stop for lunch, then I travelled for two hours at fifty-five miles an hour."

1. Complete this table showing the distances traveled by the end of each stage of my journey.

Time in hours	2:00	2:30	3:30	4:00	6:00
Distance from home in miles	0	20	70	70	180

2. Draw a distance-time graph for this journey on the grid below.



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T1

3. What is the average speed for the whole journey? 45mph

Explain how you figured it out.

I figured that if I divided the trip into 1/2 hour sections and what speed the car was traveling at for each 1/2 section and added all 8 sections speeds together & divided by 8 I could get the average speed.

4. Use your graph to find:

a. How far from home I had traveled by 5:15.

140 miles

b. At what time I had traveled 60 miles from home.

3:15 hours

40
50
50
0
55
55
55
55
360

10 7

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Journey

T2

This problem gives you the chance to:
• draw and interpret a graph of speed, distance and time

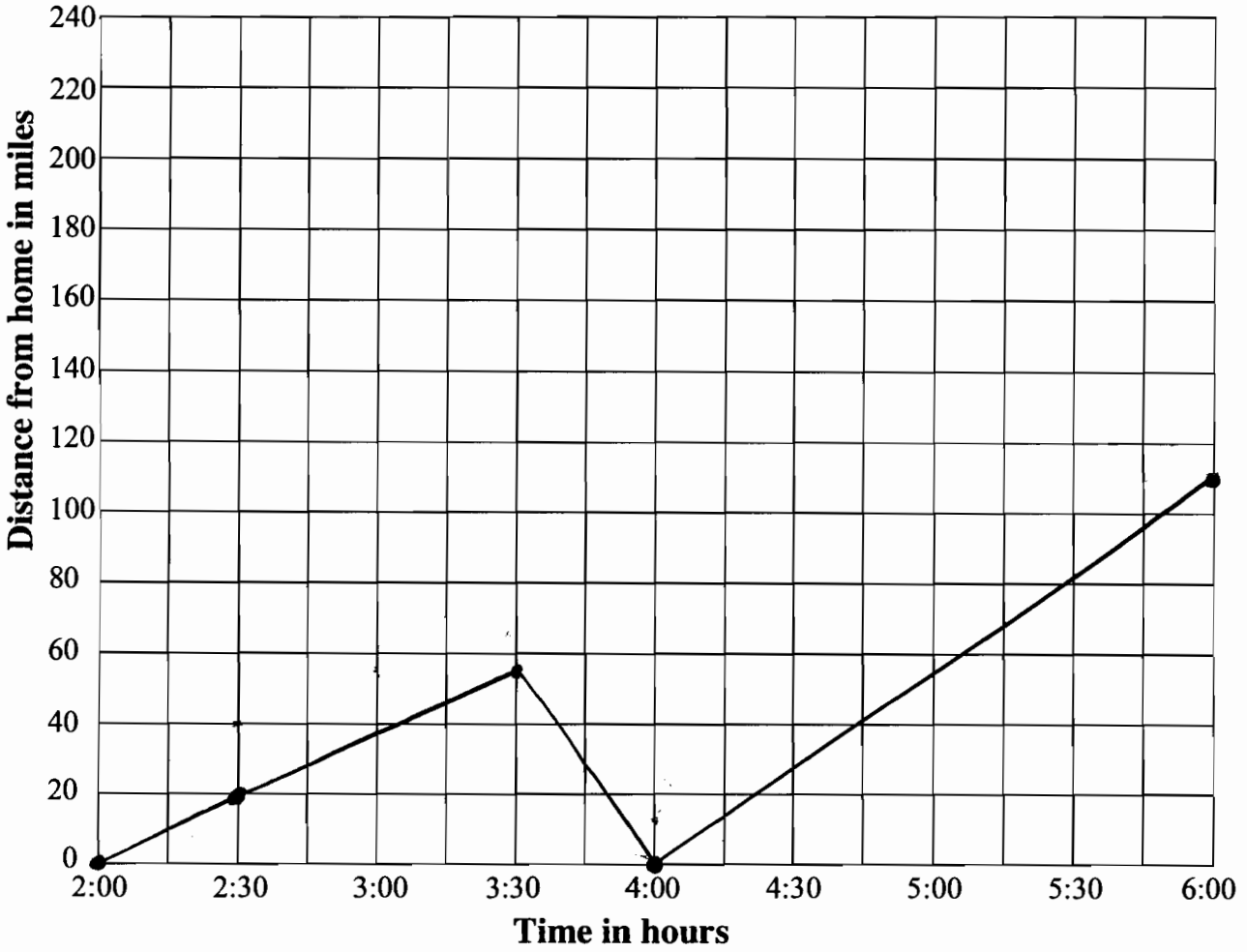
Here is a description of a car journey.

> "I left home at 2:00 hours. I traveled for half an hour at forty miles an hour, then for an hour at fifty miles an hour. I had a half hour stop for lunch, then I travelled for two hours at fifty-five miles an hour."

1. Complete this table showing the distances traveled by the end of each stage of my journey.

Time in hours	2:00	2:30	3:30	4:00	6:00
Distance from home in miles	0	20	55	0	110

2. Draw a distance-time graph for this journey on the grid below.



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T2

3. What is the average speed for the whole journey? 30 mph

Explain how you figured it out.

I added all the numbers in the chart up then divided by 5

4. Use your graph to find:

a. How far from home I had traveled by 5:15. 70 miles

b. At what time I had traveled 60 miles from home. 5:05 hours

7

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Journey

T3

This problem gives you the chance to:
• draw and interpret a graph of speed, distance and time

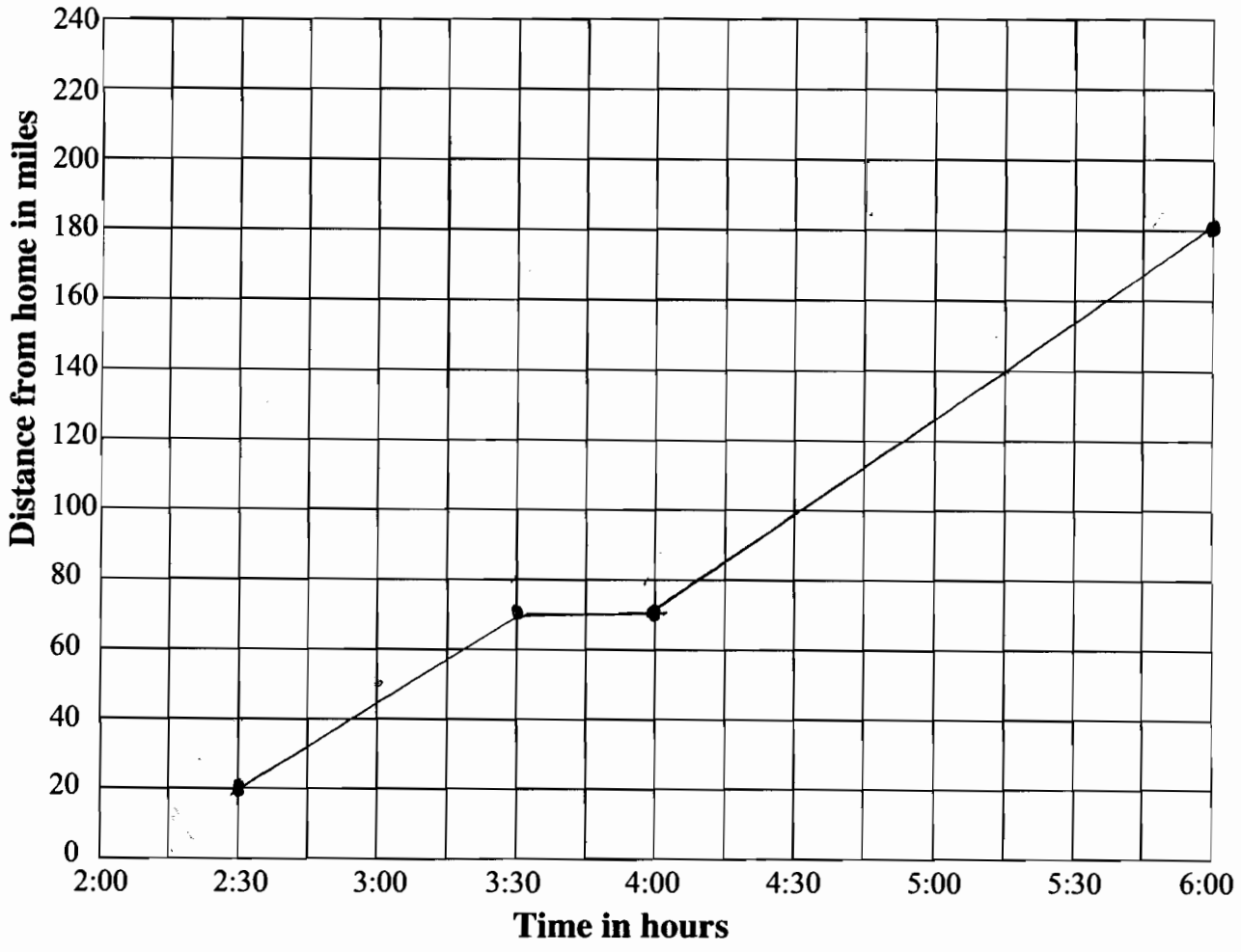
Here is a description of a car journey.

> "I left home at 2:00 hours. I traveled for half an hour at forty miles an hour, then for an hour at fifty miles an hour. I had a half hour stop for lunch, then I travelled for two hours at fifty-five miles an hour."

1. Complete this table showing the distances traveled by the end of each stage of my journey.

Time in hours	2:00	2:30	3:30	4:00	6:00
Distance from home in miles	0	20	70	70	180

2. Draw a distance-time graph for this journey on the grid below.



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T3

3. What is the average speed for the whole journey? 50 mph

Explain how you figured it out.

I knew that 1/4 of her time she was going 40+50 mph, and 1/2 of it she was going 55 mph, so then I got 40, 50, 55, 55, and found the mean for that

4. Use your graph to find:

a. How far from home I had traveled by 5:15. 140 miles

b. At what time I had traveled 60 miles from home. about 3:20 hours

1 hr: 40 mph
1 hr = 50 mph
1/2 hr - STOP
2 hr = 55 mph

40, 50, 55, 55

1/4 = 40 mph

1/4 = 50 mph

1/2 = 55 mph

7

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Journey

T4

This problem gives you the chance to:
• draw and interpret a graph of speed, distance and time

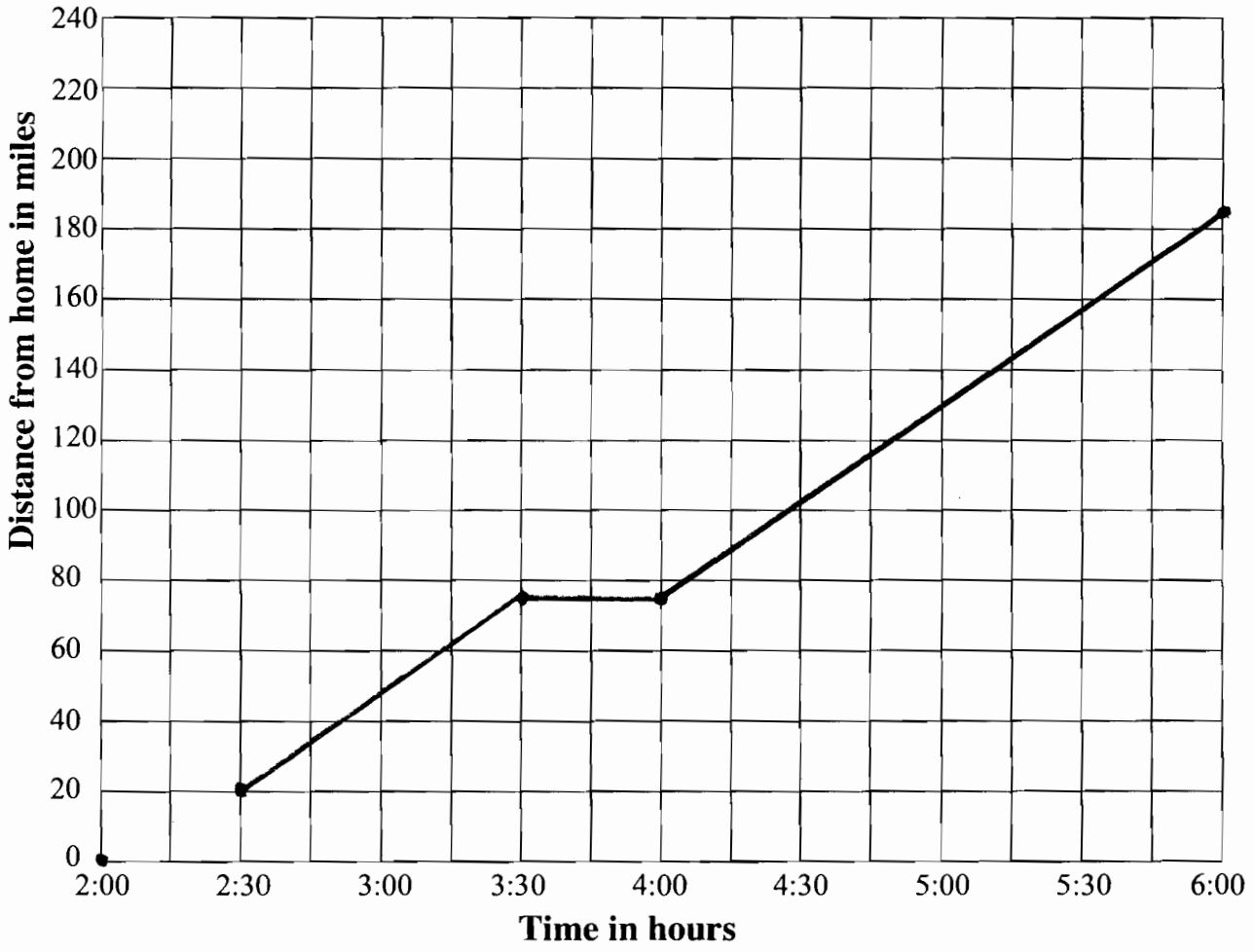
Here is a description of a car journey.

> "I left home at 2:00 hours. I traveled for half an hour at forty miles an hour, then for an hour at fifty miles an hour. I had a half hour stop for lunch, then I travelled for two hours at fifty-five miles an hour."

1. Complete this table showing the distances traveled by the end of each stage of my journey.

Time in hours	2:00	2:30	3:30	4:00	6:00
Distance from home in miles	0	20	75	75	185

2. Draw a distance-time graph for this journey on the grid below.



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T4

3. What is the average speed for the whole journey? 48.3 mph.

Explain how you figured it out.

I added up 40+50+55 and got 145. Then I divided that by 3 and got 48.3.

4. Use your graph to find:

a. How far from home I had traveled by 5:15.

about 140 miles

b. At what time I had traveled 60 miles from home.

3:15 hours

10
7

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Journey

T5

This problem gives you the chance to:
• draw and interpret a graph of speed, distance and time

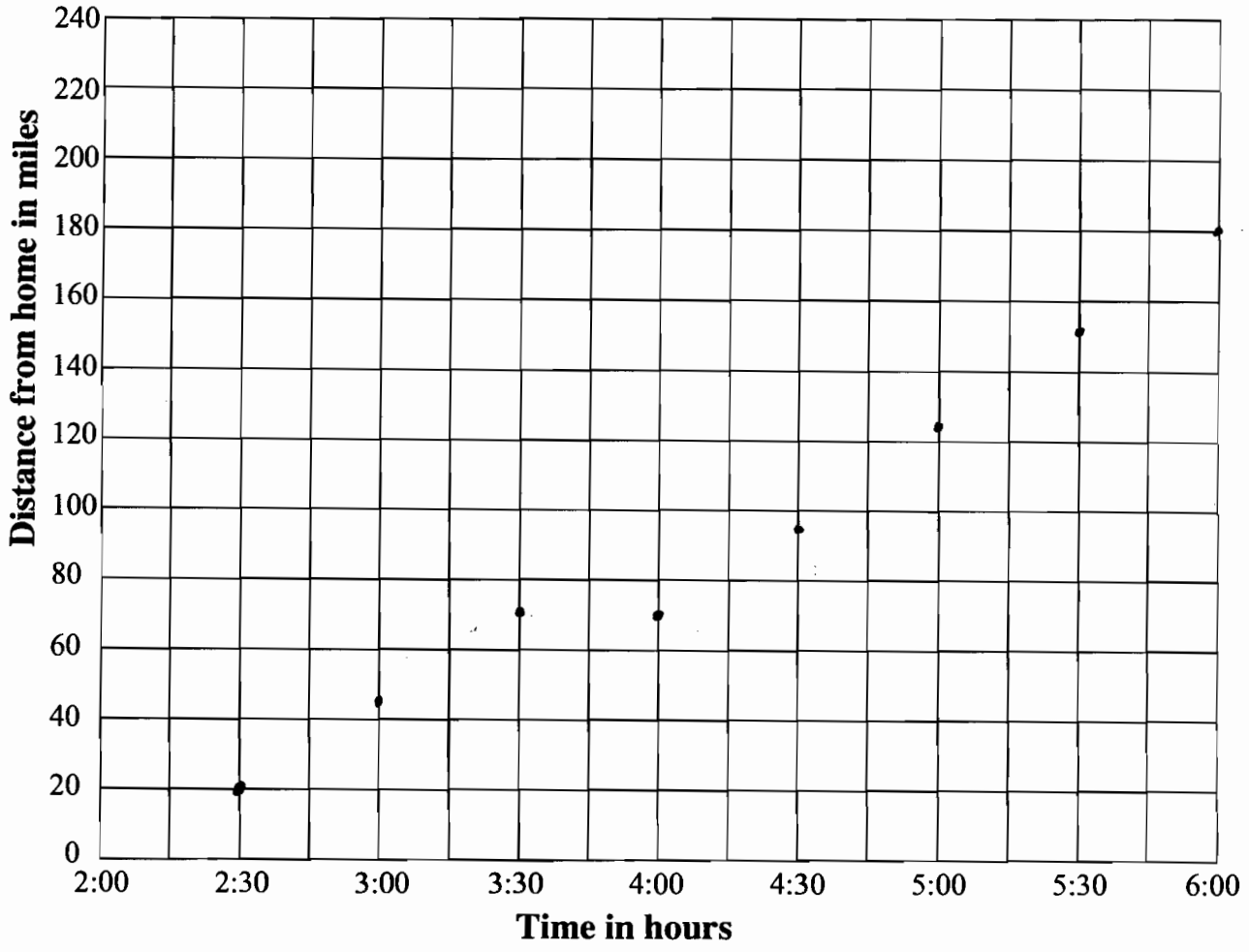
Here is a description of a car journey.

> "I left home at 2:00 hours. I traveled for half an hour at forty miles an hour, then for an hour at fifty miles an hour. I had a half hour stop for lunch, then I travelled for two hours at fifty-five miles an hour."

1. Complete this table showing the distances traveled by the end of each stage of my journey.

Time in hours	2:00	2:30	3:30	4:00	6:00
Distance from home in miles	0	20	70	70	180

2. Draw a distance-time graph for this journey on the grid below.



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3. What is the average speed for the whole journey? 45 mph

Explain how you figured it out.

I divided 180 by 4.

4. Use your graph to find:

a. How far from home I had traveled by 5:15.

138.75 miles

b. At what time I had traveled 60 miles from home.

about 1 1/4 hours

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Journey

S1

This problem gives you the chance to:
• draw and interpret a graph of speed, distance and time

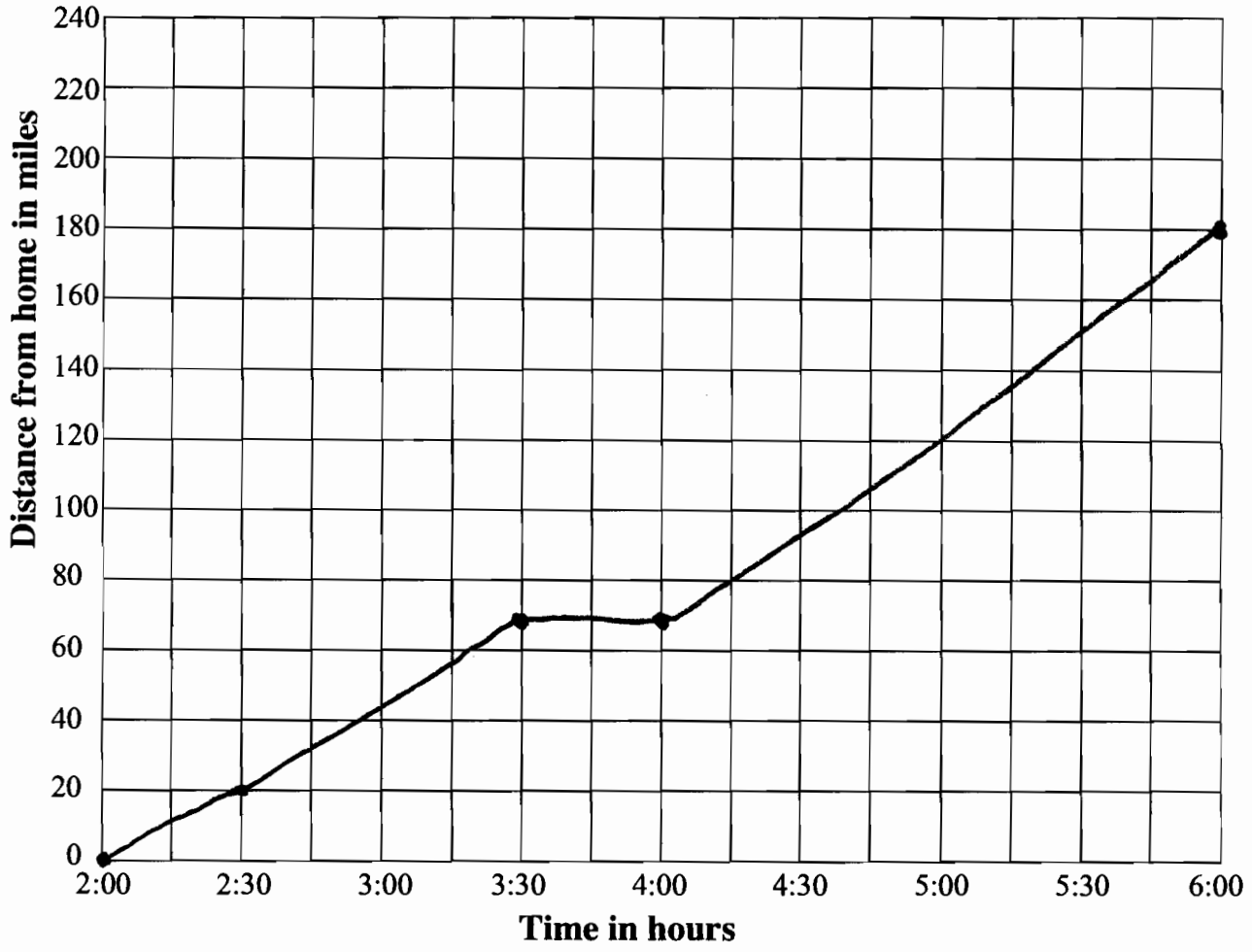
Here is a description of a car journey.

> "I left home at 2:00 hours. I traveled for half an hour at forty miles an hour, then for an hour at fifty miles an hour. I had a half hour stop for lunch, then I travelled for two hours at fifty-five miles an hour."

1. Complete this table showing the distances traveled by the end of each stage of my journey.

Time in hours	2:00	2:30	3:30	4:00	6:00
Distance from home in miles	0	40	70	70	180

2. Draw a distance-time graph for this journey on the grid below.



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3. What is the average speed for the whole journey? 45mph

Explain how you figured it out.

You did 180 by 40 you get 45 mph. She traveled 9 hours and went 180 miles from home so 45 mph.

4. Use your graph to find:

a. How far from home I had traveled by 5:15.

130 miles

b. At what time I had traveled 60 miles from home.

3:10 hours

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Journey

S2

This problem gives you the chance to:
- draw and interpret a graph of speed, distance and time

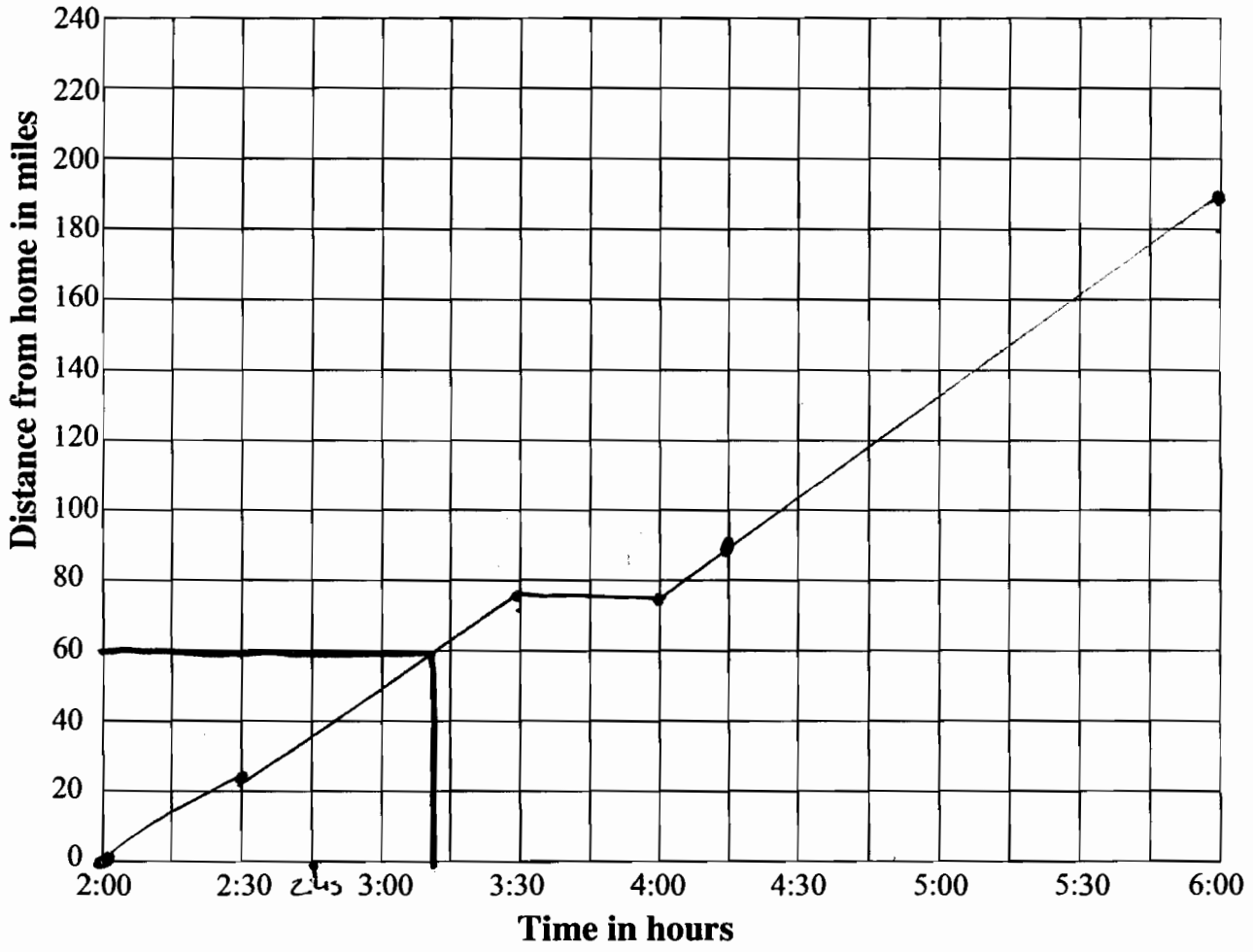
Here is a description of a car journey.

> "I left home at 2:00 hours. I traveled for half an hour at forty miles an hour, then for an hour at fifty miles an hour. I had a half hour stop for lunch, then I travelled for two hours at fifty-five miles an hour."

1. Complete this table showing the distances traveled by the end of each stage of my journey.

Time in hours	2:00	2:30	3:30	4:00	6:00
Distance from home in miles	0	22.5	77.5	77.5	187.5

2. Draw a distance-time graph for this journey on the grid below.



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3. What is the average speed for the whole journey? 46.875

Explain how you figured it out.

I added all the mph's up then devided it by 4 for how many # i added

4. Use your graph to find:

a. How far from home I had traveled by 5:15. 90 miles

b. At what time I had traveled 60 miles from home. 3:10 hours

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Journey

S3

This problem gives you the chance to:
• draw and interpret a graph of speed, distance and time

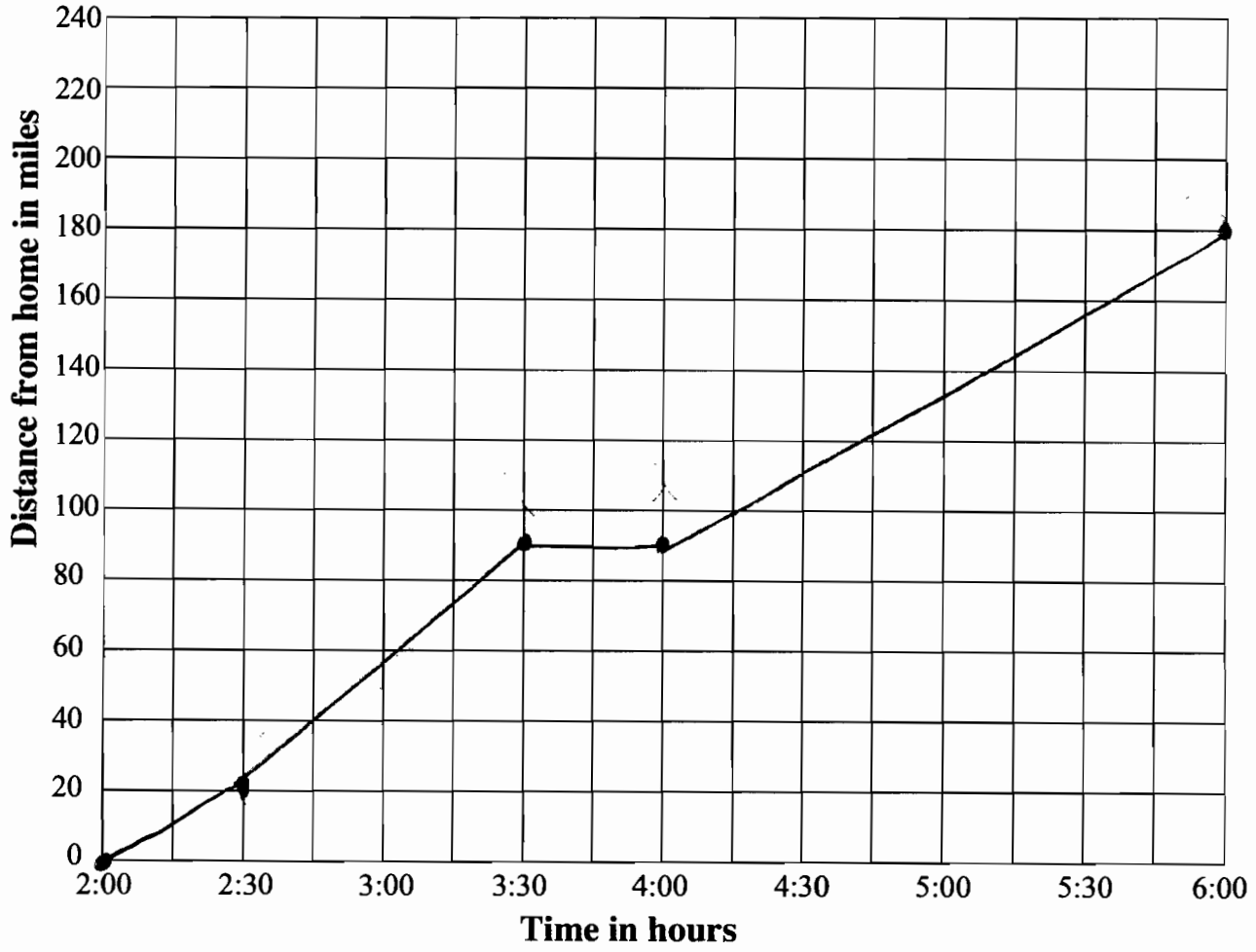
Here is a description of a car journey.

> "I left home at 2:00 hours. I traveled for half an hour at forty miles an hour, then for an hour at fifty miles an hour. I had a half hour stop for lunch, then I travelled for two hours at fifty-five miles an hour."

1. Complete this table showing the distances traveled by the end of each stage of my journey.

Time in hours	2:00	2:30	3:30	4:00	6:00
Distance from home in miles	0	20	70	90	180

2. Draw a distance-time graph for this journey on the grid below.



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S3

3. What is the average speed for the whole journey? 45 mph

Explain how you figured it out.

40+50+50+0+55+55+55+55=360÷8=45

4. Use your graph to find:

a. How far from home I had traveled by 5:15. 145 miles

b. At what time I had traveled 60 miles from home. 3:10 hours

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Journey

S4

This problem gives you the chance to:
• draw and interpret a graph of speed, distance and time

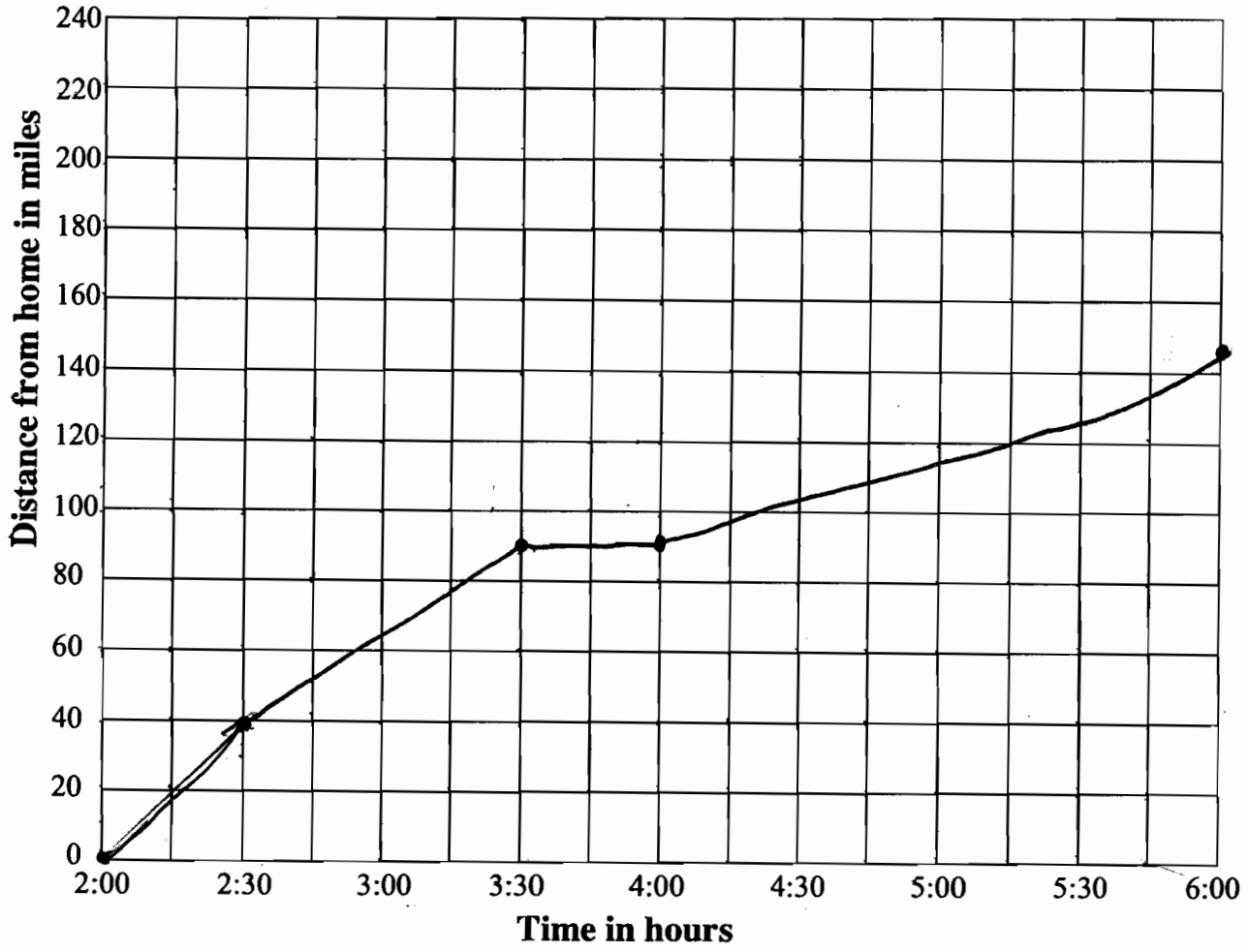
Here is a description of a car journey.

> "I left home at 2:00 hours. I traveled for half an hour at forty miles an hour, then for an hour at fifty miles an hour. I had a half hour stop for lunch, then I travelled for two hours at fifty-five miles an hour."

1. Complete this table showing the distances traveled by the end of each stage of my journey.

Time in hours	2:00	2:30	3:30	4:00	6:00
Distance from home in miles	0	40	90	90	145

2. Draw a distance-time graph for this journey on the grid below.



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3. What is the average speed for the whole journey? 50

Explain how you figured it out.

I just counted the distance between the miles away from home

4. Use your graph to find:

   a. How far from home I had traveled by 5:15. 9.70 miles

   b. At what time I had traveled 60 miles from home. 1.20 hours

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Journey

This problem gives you the chance to:
• draw and interpret a graph of speed, distance and time

S5

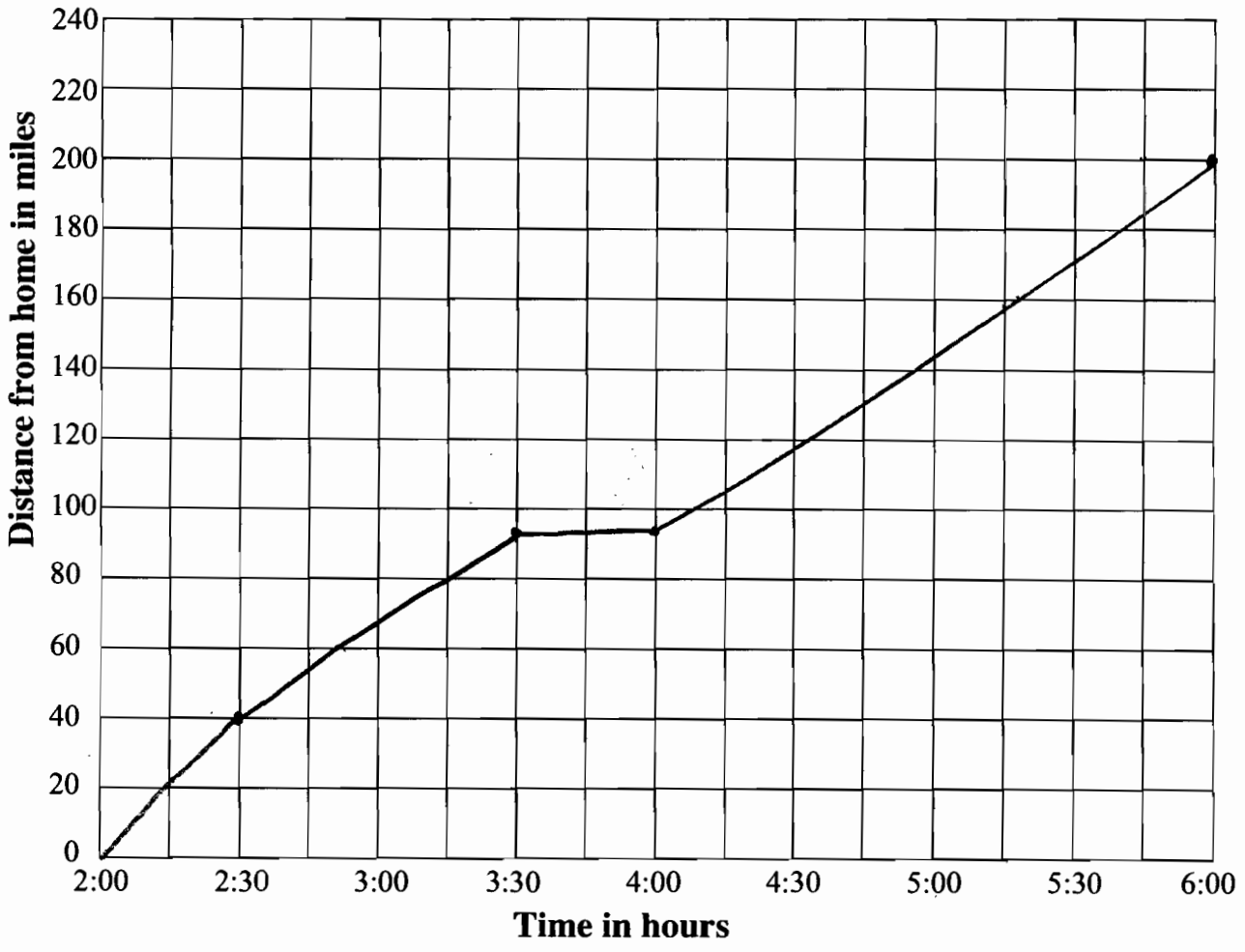
Here is a description of a car journey.

> "I left home at 2:00 hours. I traveled for half an hour at forty miles an hour, then for an hour at fifty miles an hour. I had a half hour stop for lunch, then I travelled for two hours at fifty-five miles an hour."

1. Complete this table showing the distances traveled by the end of each stage of my journey.

Time in hours	2:00	2:30	3:30	4:00	6:00
Distance from home in miles	0	40	90	90	200

2. Draw a distance-time graph for this journey on the grid below.



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3. What is the average speed for the whole journey? about 48

Explain how you figured it out.

I added 40+50+55, and got 145. I then divided 145 by 3 and got 48.3 but rounded down to 48.

4. Use your graph to find:

a. How far from home I had traveled by 5:15.

about 160 miles

b. At what time I had traveled 60 miles from home.

around 2:50 hours

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Journey

This problem gives you the chance to:
• draw and interpret a graph of speed, distance and time

S6

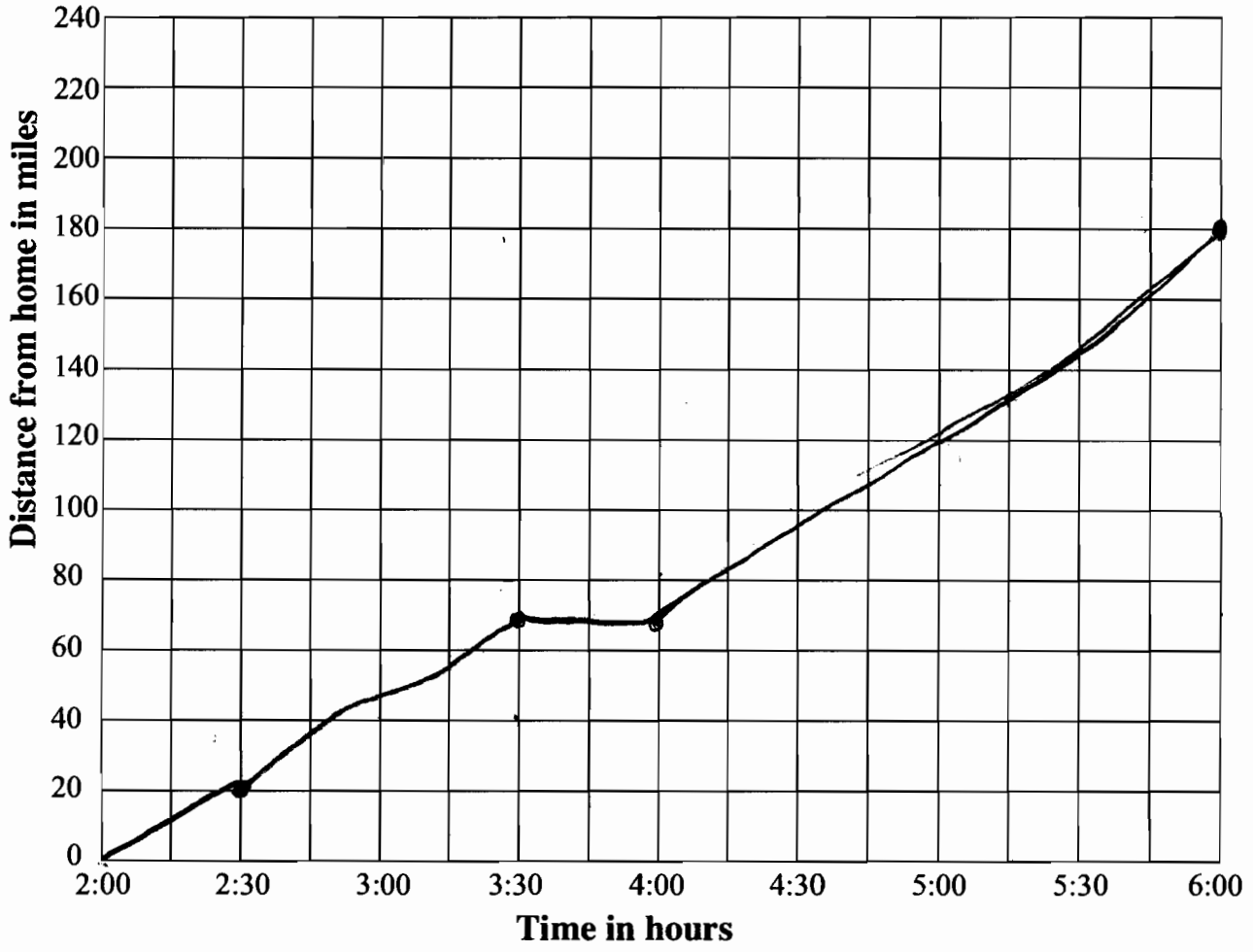
Here is a description of a car journey.

> "I left home at 2:00 hours. I traveled for half an hour at forty miles an hour, then for an hour at fifty miles an hour. I had a half hour stop for lunch, then I travelled for two hours at fifty-five miles an hour."

1. Complete this table showing the distances traveled by the end of each stage of my journey.

Time in hours	2:00	2:30	3:30	4:00	6:00
Distance from home in miles	0	20	70	70	180

2. Draw a distance-time graph for this journey on the grid below.



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$\frac{\text{miles}}{\text{time}}$: $\frac{180}{4\text{ hrs}} = \frac{}{1}$

3. What is the average speed for the whole journey? 45 mi/hr.

Explain how you figured it out.

I used a ratio of $\frac{180 \text{ miles}}{4 \text{ hrs}} = \frac{x}{1}$, $x = 45$

4. Use your graph to find:

a. How far from home I had traveled by 5:15.

approx 130 miles

b. At what time I had traveled 60 miles from home.

approx 3:20 hours

$$4 \overline{)180} \quad 45, \ 16, \ 20$$

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Journey

This problem gives you the chance to:
• draw and interpret a graph of speed, distance and time

S7

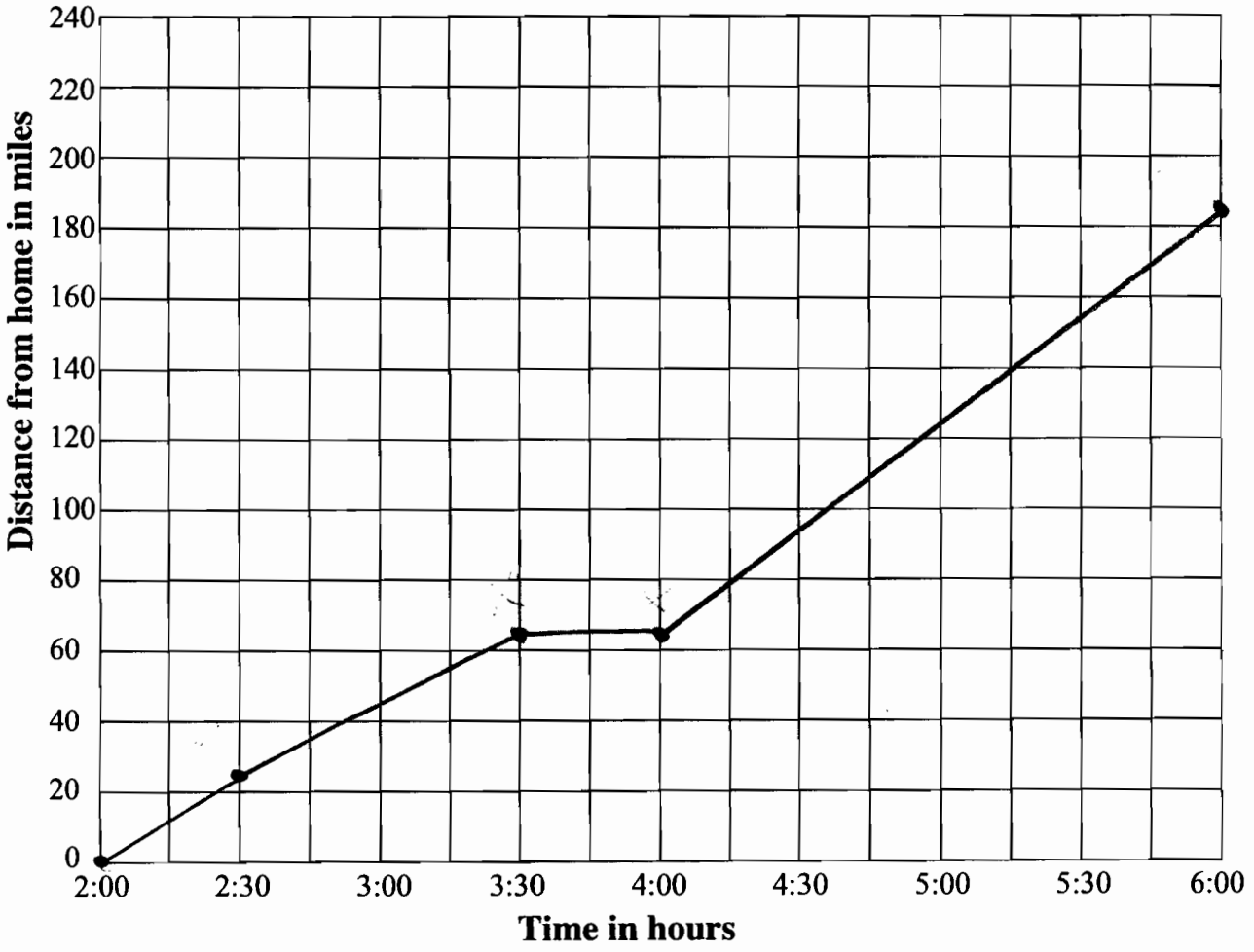
Here is a description of a car journey.

> "I left home at 2:00 hours. I traveled for half an hour at forty miles an hour, then for an hour at fifty miles an hour. I had a half hour stop for lunch, then I travelled for two hours at fifty-five miles an hour."

1. Complete this table showing the distances traveled by the end of each stage of my journey.

Time in hours	2:00	2:30	3:30	4:00	6:00
Distance from home in miles	0	22.5	72.5	72.5	182.5

2. Draw a distance-time graph for this journey on the grid below.



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3. What is the average speed for the whole journey? 45.625

Explain how you figured it out.

I added 22.5 (half of 45), 50, 0, and 110 (twice of 55). Then divided it by 4.

4. Use your graph to find:

a. How far from home I had traveled by 5:15. 140 miles

b. At what time I had traveled 60 miles from home. 3:17'50 hours

10

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Journey

S8

This problem gives you the chance to:
• draw and interpret a graph of speed, distance and time

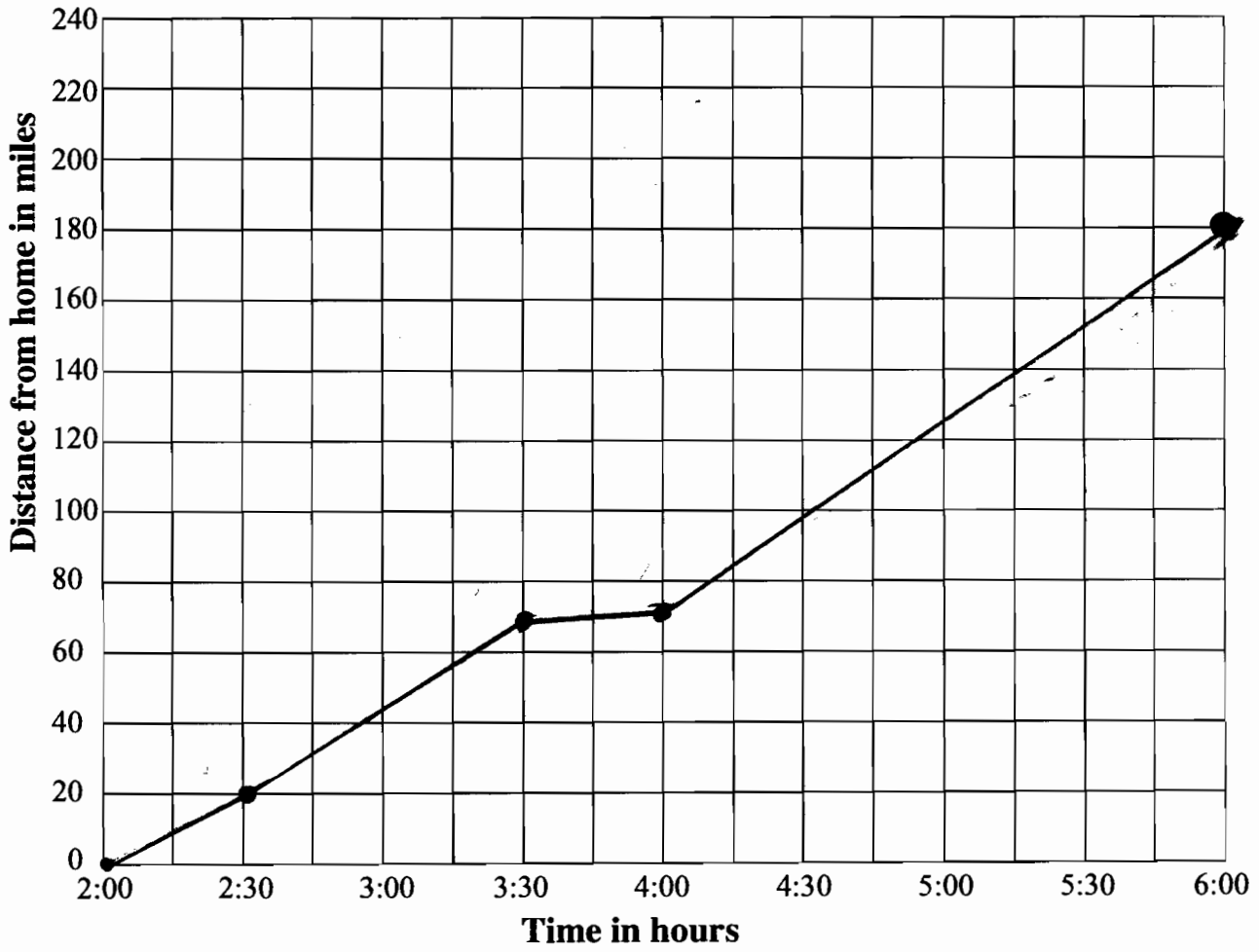
Here is a description of a car journey.

> "I left home at 2:00 hours. I traveled for half an hour at forty miles an hour, then for an hour at fifty miles an hour. I had a half hour stop for lunch, then I travelled for two hours at fifty-five miles an hour."

1. Complete this table showing the distances traveled by the end of each stage of my journey.

Time in hours	2:00	2:30	3:30	4:00	6:00
Distance from home in miles	0	20	70	70	180

2. Draw a distance-time graph for this journey on the grid below.



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3. What is the average speed for the whole journey? 50mph

Explain how you figured it out.

he was pretty much going 50mph the whole time.

4. Use your graph to find:

a. How far from home I had traveled by 5:15. 140 miles

b. At what time I had traveled 60 miles from home. 3:17 hours

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Journey

S9

This problem gives you the chance to:
- draw and interpret a graph of speed, distance and time

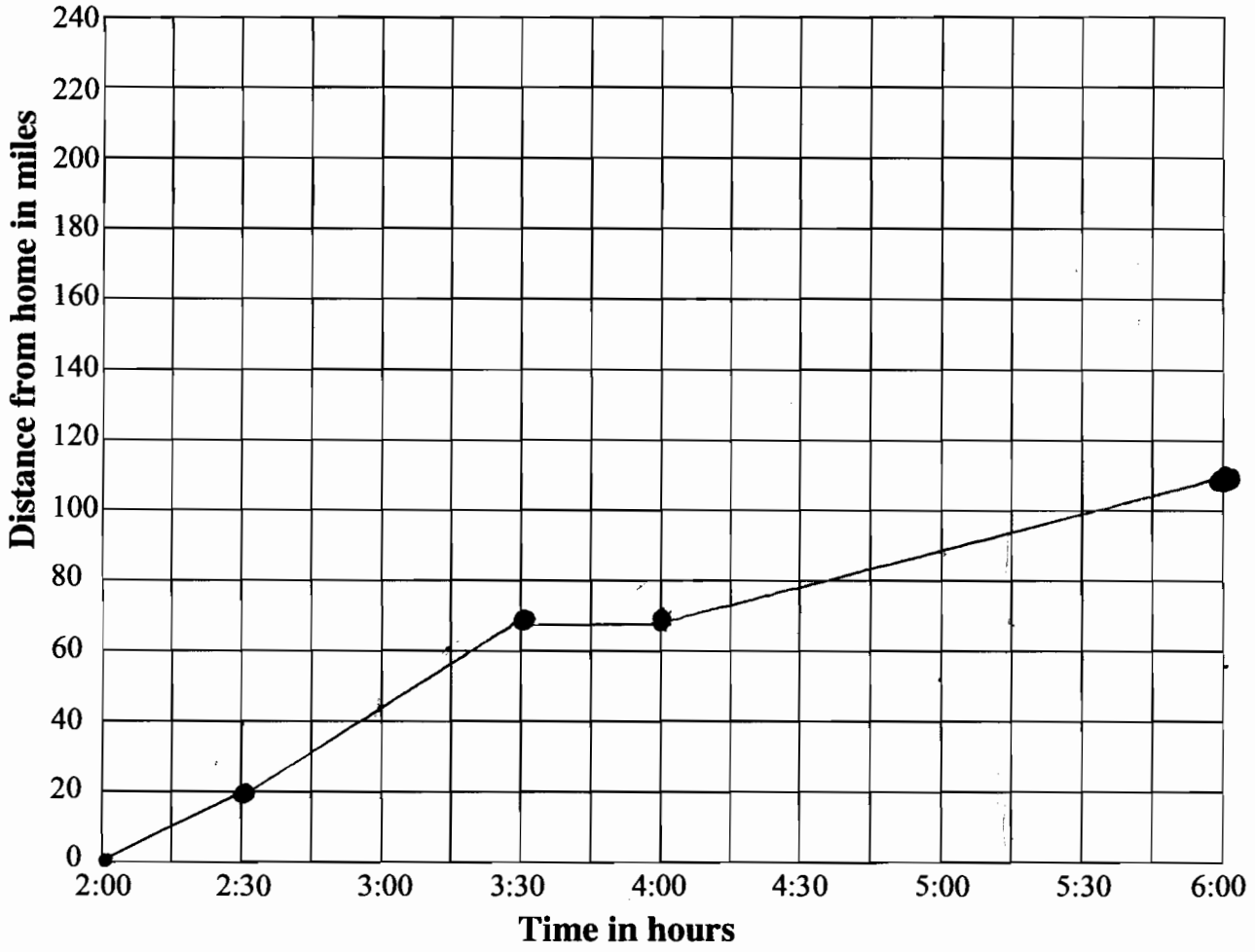
Here is a description of a car journey.

> "I left home at 2:00 hours. I traveled for half an hour at forty miles an hour, then for an hour at fifty miles an hour. I had a half hour stop for lunch, then I travelled for two hours at fifty-five miles an hour."

1. Complete this table showing the distances traveled by the end of each stage of my journey.

Time in hours	2:00	2:30	3:30	4:00	6:00
Distance from home in miles	0	20	70	70	110

2. Draw a distance-time graph for this journey on the grid below.



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3. What is the average speed for the whole journey? 48.3

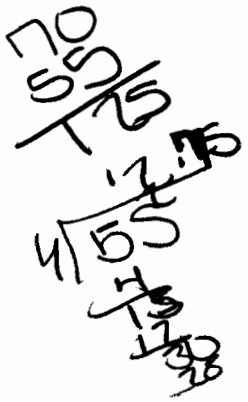
Explain how you figured it out.

I added 40+50+55=145 and divided that by 3.

4. Use your graph to find:

a. How far from home I had traveled by 5:15. 137.75 miles

b. At what time I had traveled 60 miles from home. 3:15 hours



13

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Journey

This problem gives you the chance to:
• draw and interpret a graph of speed, distance and time

S10

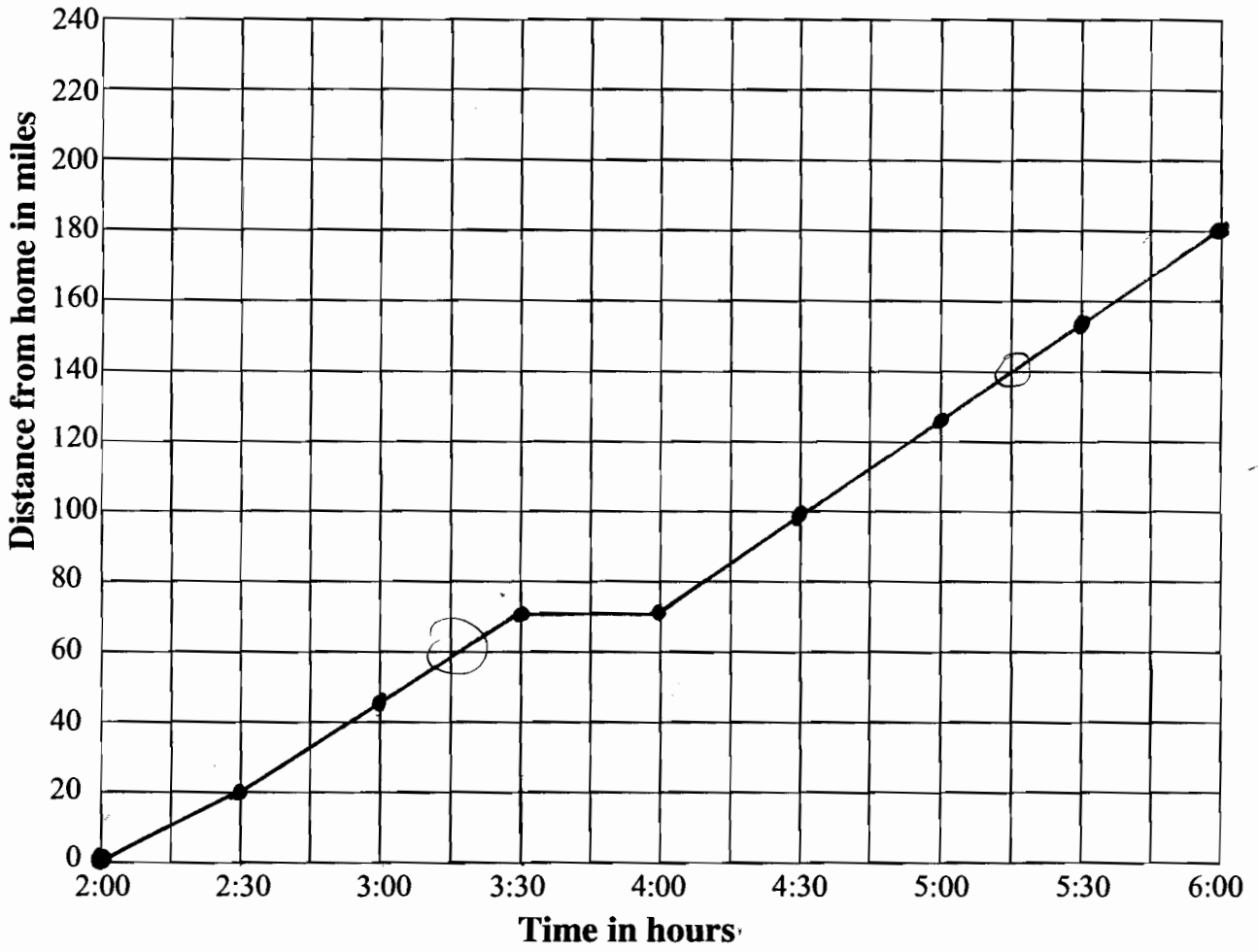
Here is a description of a car journey.

> "I left home at 2:00 hours. I traveled for half an hour at forty miles an hour, then for an hour at fifty miles an hour. I had a half hour stop for lunch, then I travelled for two hours at fifty-five miles an hour."

1. Complete this table showing the distances traveled by the end of each stage of my journey.

Time in hours	2:00	2:30	3:30	4:00	6:00
Distance from home in miles	0	20	70	70	180
		20	50	0	110

2. Draw a distance-time graph for this journey on the grid below.



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S10

3. What is the average speed for the whole journey? 36.25mph

Explain how you figured it out.

I added 40+50+0+55=145÷4=36.25

4. Use your graph to find:

a. How far from home I had traveled by 5:15.

140 miles

b. At what time I had traveled 60 miles from home.

3:15 hours

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