

# Reasoning and Problem Solving

## Step 5: Find Durations of Time

### National Curriculum Objectives:

Mathematics Year 2: (2M4a) [Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times](#)

Mathematics Year 2: (2M4b) [Compare and sequence intervals of time](#)

### Differentiation:

Questions 1, 4 and 7 (Reasoning)

**Developing** Read the statement and use the analogue clocks to calculate the correct duration of time. Times start at o'clock and half past the hour and durations are in multiples of 15.

**Expected** Read the statement and use the analogue clocks to calculate the correct duration of time. Durations are within the hour and in multiples of 5.

**Greater Depth** Read the statement and use the analogue clocks to calculate the correct duration of time. Durations pass through the hour and are in multiples of 5.

Questions 2, 5 and 8 (Reasoning)

**Developing** Use knowledge of finding the durations of time to explain whether an answer is correct. Times start at o'clock, half past and quarter to/past.

**Expected** Use knowledge of finding the durations of time to explain whether an answer is correct. Times are in multiples of 5 and within the hour.

**Greater Depth** Use knowledge of finding the durations of time to explain whether an answer is correct. Times are in multiples of 5 and pass through the hour.

Questions 3, 6 and 9 (Problem Solving)

**Developing** Read the time problem and add up the durations of time to calculate the amount of time left over. Times start at o'clock, half past and quarter to/past.

**Expected** Read the time problem and add up the durations of time to calculate the amount of time left over. Using hours and multiple of 10 minutes.

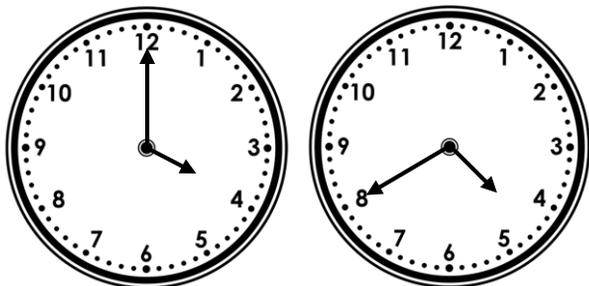
**Greater Depth** Read the time problem and add up the durations of time to calculate the amount of time left over. Using hours and multiple of 5 minutes.

More [Year 2 Time](#) resources.

Did you like this resource? Don't forget to [review](#) it on our website.

## Find Durations of Time

1a. Zofia's sewing club starts at 4 o'clock and finishes at 20 minutes to 5.



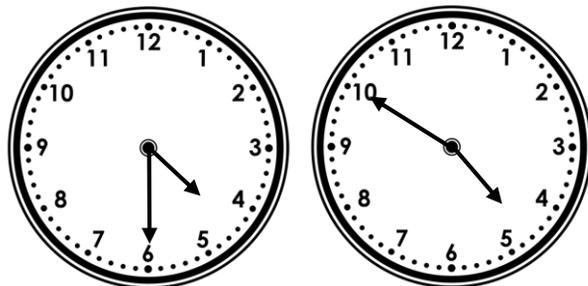
Zofia thinks sewing club last for 30 minutes.  
Is she correct? Explain your answer.



R

## Find Durations of Time

1b. Wade plays on his computer game at half past 4 and finishes at 10 minutes to 5.



Wade thinks he played on his computer for 30 minutes.  
Is he correct? Explain your answer.



R

2a. Jazmyn says,



At 3 o'clock, I rode my bike for 40 minutes. It was 25 minutes to 4 when I finished.

Is she correct?  
Explain why.



R

2b. Joel says,



I need to be at hockey training for half past 6. It takes me 20 minutes to walk there. If I set off at quarter past 6, I will get there in time.

Is he correct?  
Explain why.



R

3a. Matias goes to the arcade for 3 hours. He spends 1 hour bowling. He spends half an hour on the slot machines. He spends 1 hour playing bingo.

He spends the rest of the time trying to win a teddy.

How long does he try to win a teddy for?



PS

3b. Kristie goes to an animal show for 2 and a half hours. She spends half an hour looking at the goats and sheep. She spends 1 hour judging the dog agility competition.

She spends the rest of the time playing with the rabbits.

How long does she spend with the rabbits?

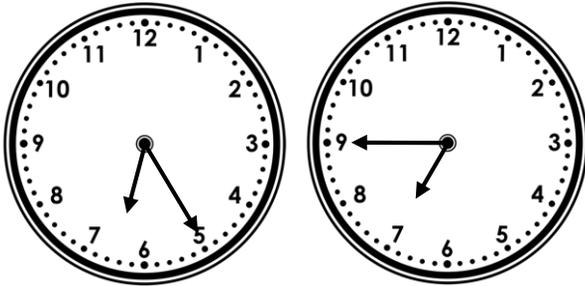


PS

## Find Durations of Time

## Find Durations of Time

4a. Abigail's netball training starts at 25 minutes past 6 and finishes at quarter to 7.



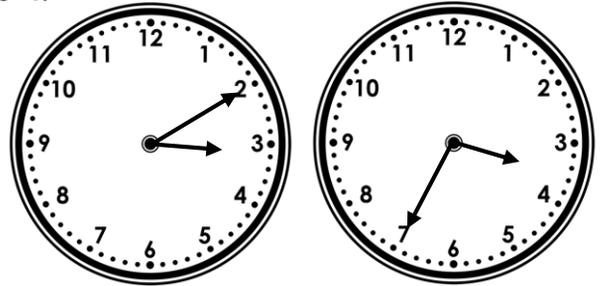
Abigail thinks her training lasts for 20 minutes.

Is she correct? Explain your answer.



R

4b. Andrei starts his homework at 10 minutes past 3 and finishes at 25 minutes to 4.



Andrei thinks he did his homework for 15 minutes.

Is he correct? Explain your answer.



R

5a. Alice says,



It takes me 45 minutes to walk to the library. If I leave my house at 10 minutes past 3, I will get to the library at 10 minutes to 4.

Is she correct?  
Explain why.



R

5b. Riaz says,



It takes 35 minutes to get to the cinema by bus. The bus leaves the station at 5 minutes past 2. It will get to the cinema for 20 minutes to 3.

Is he correct?  
Explain why.



R

6a. Lucas spends 2 hours and 30 minutes at the zoo.

He watches the lion show for 1 hour and 10 minutes.

He rides the donkeys for 20 minutes.

He spends 40 minutes on the Lazy River boat trip.

He spends the rest of the time in the Jungle Adventure.

How long does the Jungle Adventure last?



PS

6b. Luisa spends 1 hour and 40 minutes at the park.

She spends 20 minutes on the swings.

She spends half an hour feeding the ducks.

She spends 40 minutes on the rowing boats.

She spends the rest of the time riding her bike.

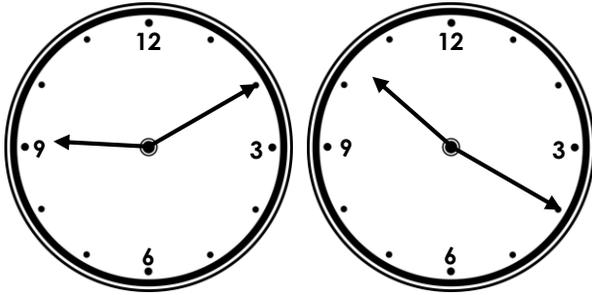
How long does she ride her bike for?



PS

## Find Durations of Time

7a. Brianna starts her run at 10 minutes past 9 and finishes at 20 minutes past 10.



Brianna thinks her run lasted for 1 hour and 5 minutes.

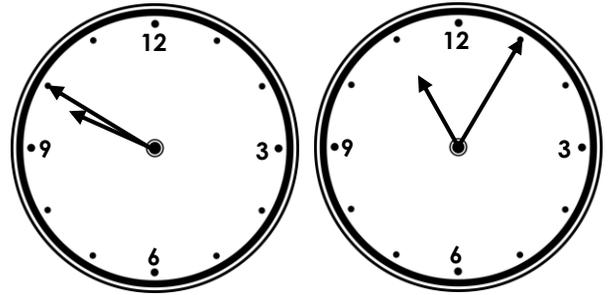
Is she correct? Explain your answer.



R

## Find Durations of Time

7b. Mitchell walks his dog at 10 minutes to 10 and finishes at 5 minutes past 11.



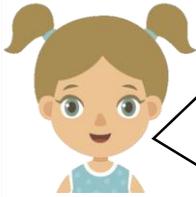
Mitchell thinks his walk lasted for 1 hour and 10 minutes.

Is he correct? Explain your answer.



R

8a. Harrian says,



The film lasts 1 hour and 25 minutes. If I start watching it at 10 minutes past 5, it will be finished by 25 minutes past 7.

Is she correct?  
Explain why.



R

8b. Rio says,



It takes 1 hour and 5 minutes to cycle around the park. If I start cycling at 20 minutes past 1, I will be finished by 25 minutes past 2.

Is he correct?  
Explain why.



R

9a. Paloma goes to the shopping centre for 3 hours.  
She spends 45 minutes in the sweet shop.  
She spends 1 hour and 20 minutes in the clothes shop.  
She spends 35 minutes in the shoe shop.

She spends the rest of the time in the sports shop.

How long does she spend in the sports shop?



PS

9b. Dominic spends 2 hours and 45 minutes in the museum.  
He spends 55 minutes in the Jurassic World exhibition.  
He spends 1 hour in the Roman archive.  
He spends 20 minutes looking at the fossils.

He spends the rest of the time looking at the solar system.

How long does he look at the solar system for?



PS

## Reasoning and Problem Solving Find Durations of Time

### Developing

- 1a. Zofia is incorrect because there are 40 minutes between 4 o'clock and 20 minutes to 5.  
2a. Jazmyn is incorrect because 3 o'clock add 40 minutes = 20 minutes to 4.  
3a. 30 minutes

### Expected

- 4a. Abigail is correct because there are 20 minutes between 25 minutes past 6 and quarter to 7.  
5a. Alice is incorrect because 10 minutes past 3 add 45 minutes = 5 minutes to 4.  
6a. 20 minutes

### Greater Depth

- 7a. Brianna is incorrect because there is 1 hour and 10 minutes between 10 minutes past 9 and 20 minutes past 10.  
8a. Harrian is incorrect because 10 minutes past 5 add 1 hour and 25 minutes = 25 minutes to 7.  
9a. 20 minutes

## Reasoning and Problem Solving Find Durations of Time

### Developing

- 1b. Wade is incorrect because there are 20 minutes between half past 4 and 10 minutes to 5.  
2b. Joel is incorrect because quarter past 6 add 20 minutes = 25 minutes to 7.  
3b. 1 hour

### Expected

- 4b. Andrei is incorrect because there are 25 minutes between 10 minutes past 3 and 25 minutes to 4.  
5b. Riaz is correct because 5 minutes past 2 add 35 minutes = 20 minutes to 3.  
6b. 10 minutes

### Greater Depth

- 7b. Mitchell is incorrect because there is 1 hour and 15 minutes between 10 minutes to 10 and 5 minutes past 11.  
8b. Rio is correct because 20 minutes past 1 add 1 hour and 5 minutes = 25 minutes past 2.  
9b. 30 minutes