5 - 1 How to Read the Time Intervals
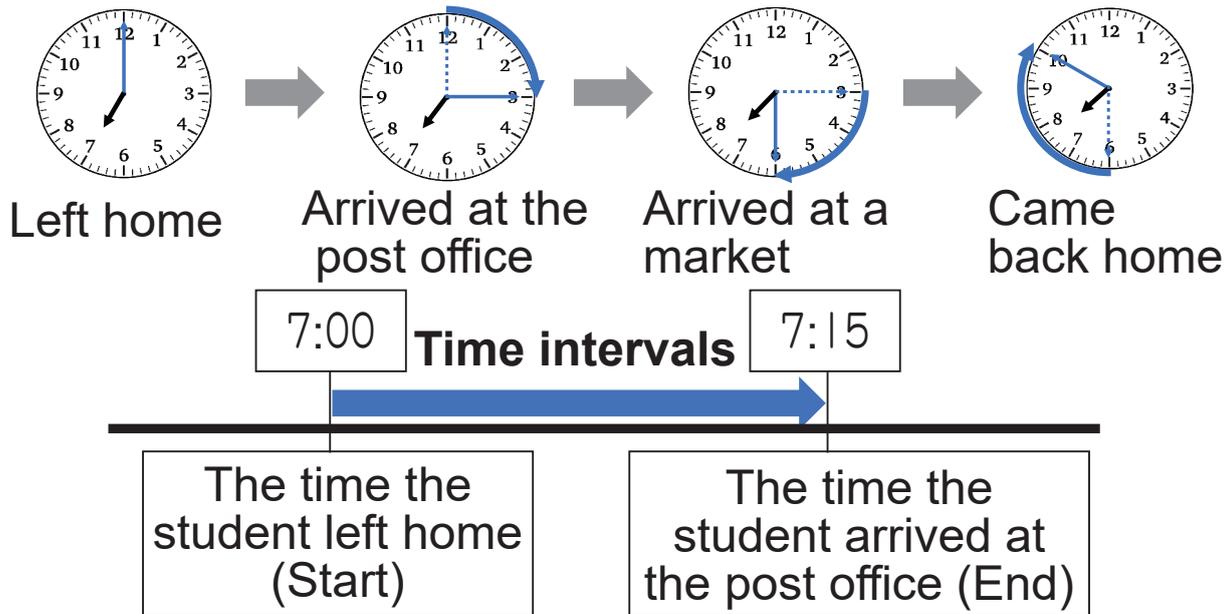
Instruction A student goes to town to buy stamps and groceries. How many minutes did it take from when the student left home until he arrived at the post office?
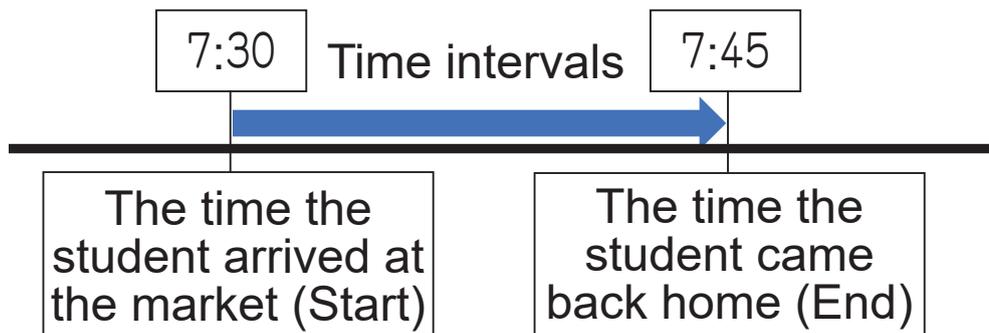

Left home → Arrived at the post office → Arrived at a market → Came back home

7:00 **Time intervals** 7:15

The time the student left home (Start)

The time the student arrived at the post office (End)

It took 15 minutes from the time the student left home to the time the student arrived at the post office.

*A time interval means working out how long something takes.*

Example 1 How many minutes did it take from when the student arrived at the market until the student came back home?

7:30 Time intervals 7:45

The time the student arrived at the market (Start)

The time the student came back home (End)

40

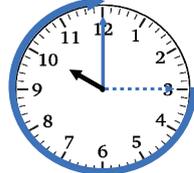It took ⌊ 15 ⌋ minutes from the time the student arrived at the market until he came back home.

1 A girl goes to town to have tea and buy groceries.
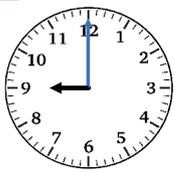
| Left home	Arrived at a bus stop	Arrived at a market	Came back home

① How many minutes did it take from when she left home until she arrived at the bus stop?

It took ⌊　⌋ minutes.

② How many minutes did it take from when she arrived at the bus stop until she arrived at the market?

It took ⌊　⌋ minutes.

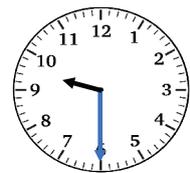**Example 2** It is 8:10 now. What is the **time point** of 10 minutes before?

?		8:10

Time intervals (10 minutes)
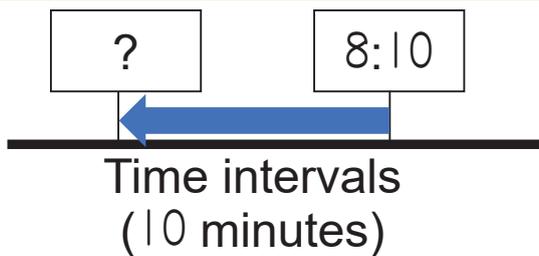
It is ⌊　⌋ .

2 It is 9:30 now. Write the time points that shows the following.

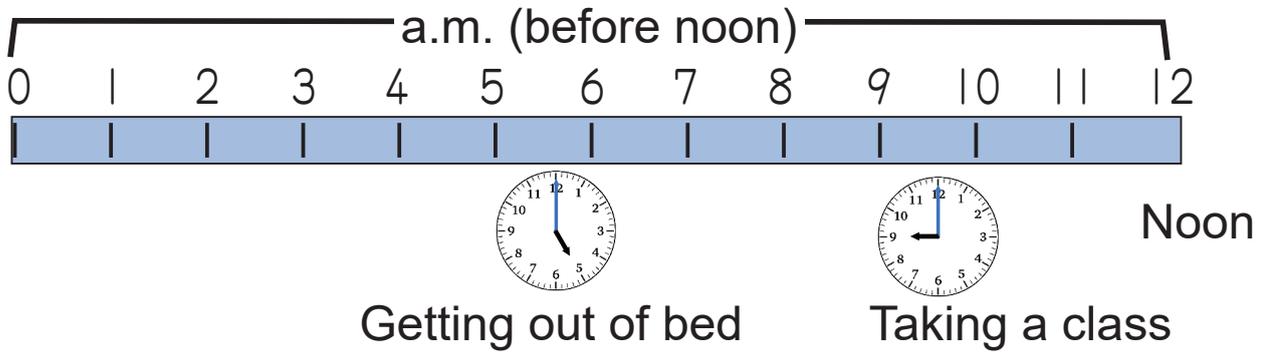① 30 minutes before ⌊　⌋

② 10 miutes after ⌊　⌋

③ 15 minutes after ⌊　⌋

④ 25 minutes before ⌊　⌋

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5 - 2　Time Points and Time Intervals

A.M. and P.M.

a.m. (before noon)

0　1　2　3　4　5　6　7　8　9　10　11　12

Noon

Getting out of bed　　　　Taking a class

Example 1　Observe the time that the clock marks for the different activities. Find out what time did the student do the following activities.

1　Getting out of bed

It's ［ 5 ］ o' clock.

2　Preparing dinner

It's ［ 5 ］ o' clock.

Instruction　AM and PM

a.m. stands for ante meridian, which means before noon（morning）
p.m. stands for post meridian, which means after noon（afternoon）

Example 2　Tell each time using a.m. and p.m.

Getting out of bed: It's 5 in the morning,　　| 5:00 a.m. |

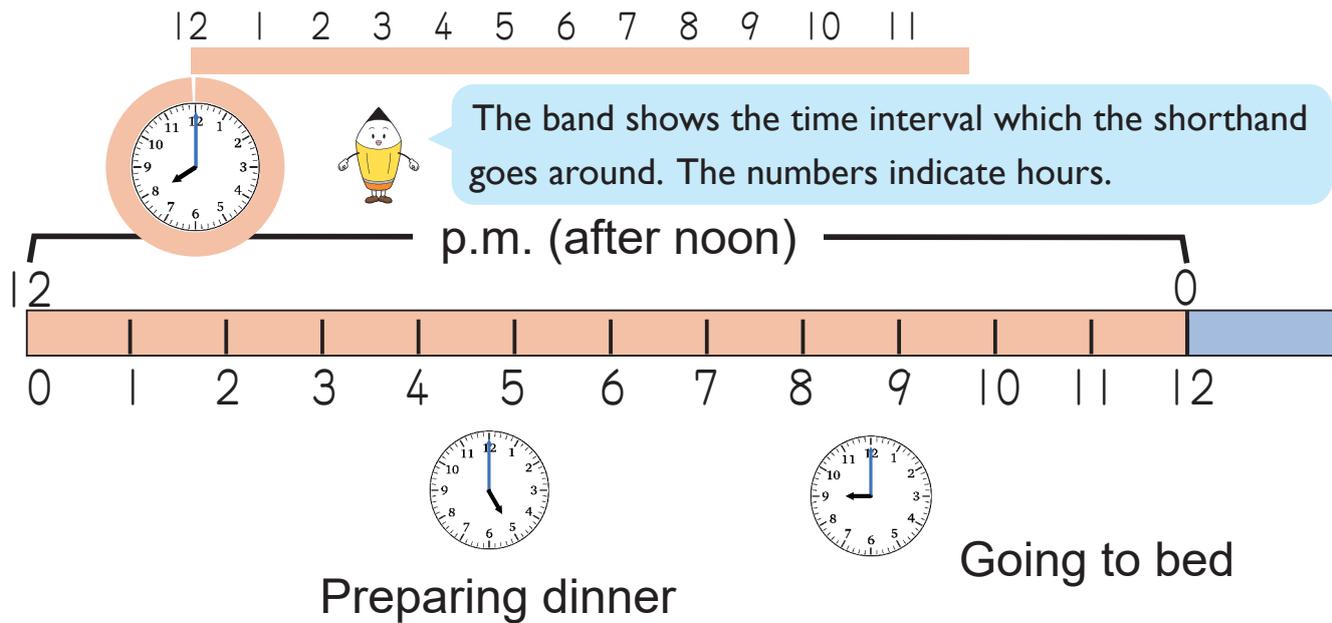Preparing dinner: It's 5 in the afternoon,　　| 5:00 p.m. |

1　Observe the time that the clock marks for the student's different activities. Find out what time did the student do the following activities using a.m. and p.m.
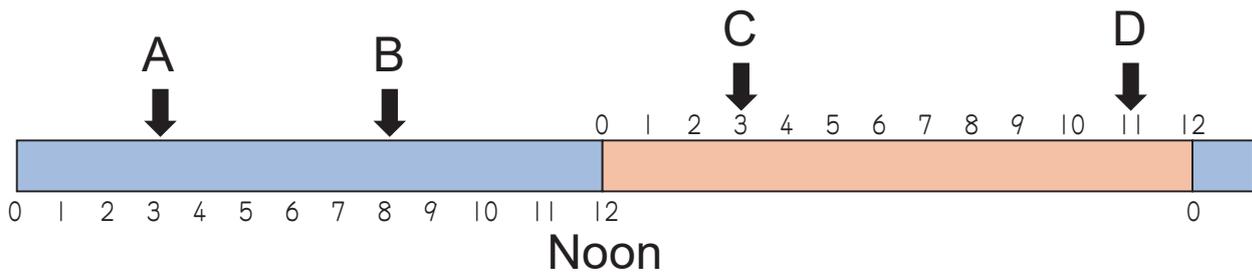
1　Taking a class
It's 9 in the morning,　　［　　　　］

2　Preparing a dinner:
It's 9 in the afternoon,　　［　　　　］

12 1 2 3 4 5 6 7 8 9 10 11

The band shows the time interval which the shorthand goes around. The numbers indicate hours.

p.m. (after noon)

12   0

0 1 2 3 4 5 6 7 8 9 10 11 12

Preparing dinner   Going to bed

2 The following tape diagram shows hours in a day starting from 12:00 a.m. What are the time points to A, B, C, and D using a.m. and p.m.?

A   B   C   D

0 1 2 3 4 5 6 7 8 9 10 11 12

0 1 2 3 4 5 6 7 8 9 10 11 12   0

Noon

1 Time point A

2 Time point B

3 Time point C

4 Time point D

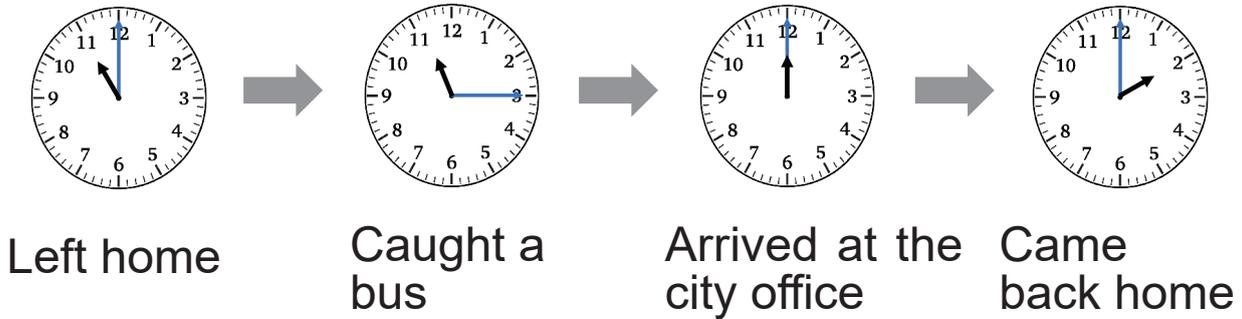**3** What time do you do the following activities? Tell the time using a.m. and p.m.

1 Getting out of bed

2 Leaving for school

3 Coming back home

4 Going to bed

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Time Points and Time Intervals
Units of time

Example 1 A teacher goes to the city office by bus.

| Left home | Caught a bus | Arrived at the city office | Came back home |

1 How many minutes did it take from his house to the office?

| 11:00 a.m. | 12:00 p.m. |

| The time he left home (Start) | The time he arrived at the city office (End) | 60 | minutes |
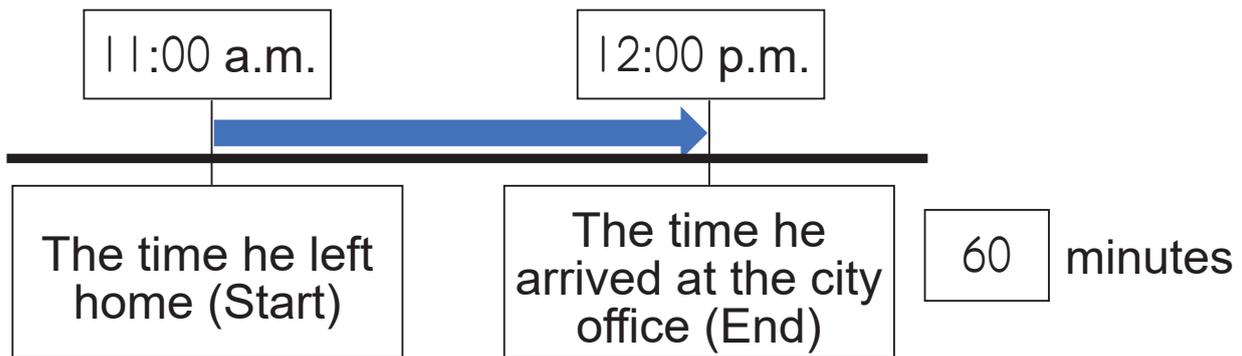
2 How many hours did it take from when the teacher left home until he came back home?

| 11:00 a.m. | 2:00 p.m. |

| The time he left home (Start) | The time he came back (End) | 3 | hours. |
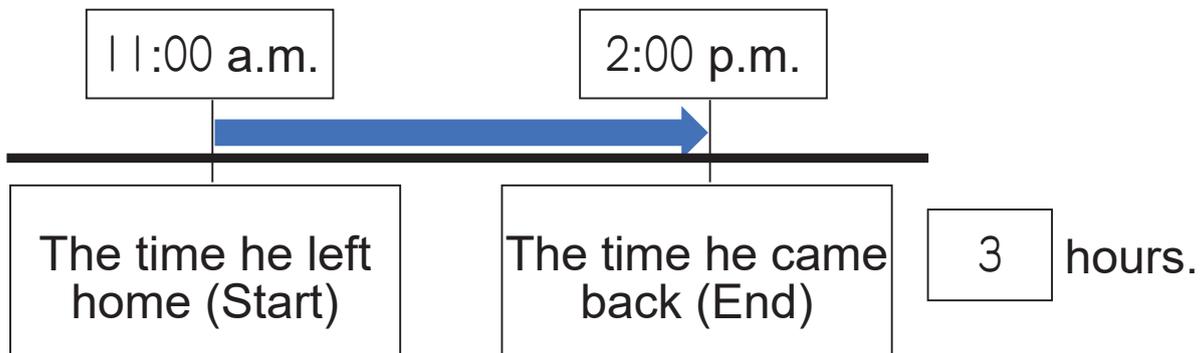
> 60 minutes equals 1 hour. 1 hour equals 60 minutes.

1 A boy goes to the city library by bus.
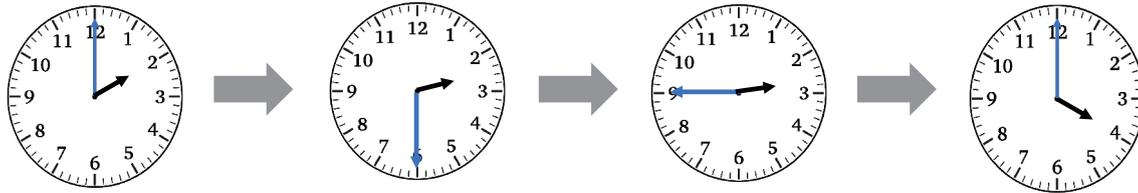
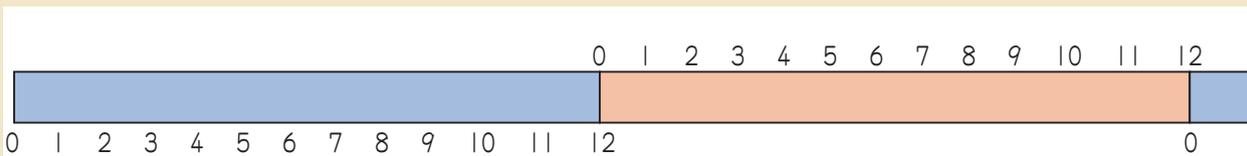| Left home	Caught a bus	Arrived at the city library	Came back home

1 How many minutes did it take from his house to catch the bus?

☐ minutes

2 How many minutes did it take from catching the bus to arriving at the city library?

☐ minutes

3 How many hours did it take from leaving home to coming back home?

☐ hours.

Example 2 The following tape diagram shows hours in a day starting from 12:00 a.m. How many hours are there in the afternoon?

0 1 2 3 4 5 6 7 8 9 10 11 12

0 1 2 3 4 5 6 7 8 9 10 11 12   0

There are ｜2 hours in the afternoon.

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2 Related to the tape diagram above, how many hours are there before noon? How many hours are there in a day?
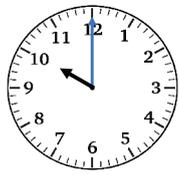
There are ☐ hours before noon.

There are ☐ hours in a day.
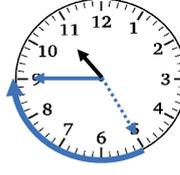
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Review

1 A girl goes to town to have tea and buy groceries.
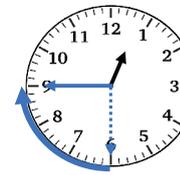
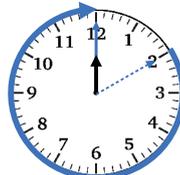Left home → Caught a bus → Arrived at a café → Arrived at a vegetable shop

Came back home ← Left town by bus ← Left the fish market ← Arrived at a fish market

1 How many minutes did it take from when she left home to catch the bus?

It took ⬚ .

2 How many hours and minutes did it take from when she arrived at the vegetable shop until she left the fish market?

It took ⬚ and ⬚ .

3 How many minutes did it take from the town to her house by bus?

It took ⬚ .

3 How many hours did it take from leaving home to coming back home?

It took ⬚ .

2 It is 10:20 now. Write the time points that shows the following.

1 10 minutes after

It is ☐ .

2 10 miutes before

It is ☐ .

3 15 minutes after

It is ☐ .

4 20 minutes before

It is ☐ .

5 45 minutes after

It is ☐ .

6 30 miutes before

It is ☐ .

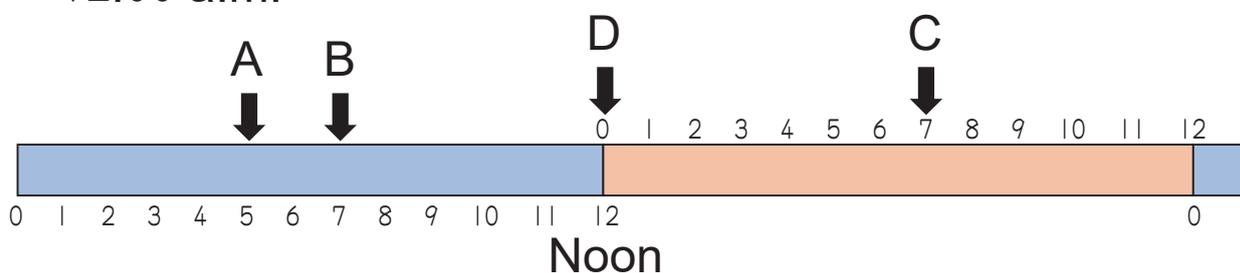**7** 1 hour after

It is ☐ .

8 4 hours before

It is ☐ .

3 The following tape diagram shows hours in a day from 12:00 a.m.

Noon

1 What are the time points to A, B, C, and D using a.m. and p.m.?

(a) Time point A

☐

(b) Time point B

☐

(c) Time point C

☐

(d) Time point D

☐

2 Fill in the blanks

(a) A day equals ☐ hours.

(b) 24 hours equals ☐ day.

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