

Jender Heart High School, Sec-33B, Chandigarh

Class - IV

Date - 18.11.2024

Subject - Mathematics

Teacher - Ms. Sushma

Chapter - 11

The time taken between the start and the end of an activity is known as the duration of the activity.

Exercise 11.7

A. Find the time interval between.

1. 3:00 a.m. and 6:00 a.m.

Soln: Starting time is 3:00 a.m.

Finishing time is 6:00 a.m.

Duration = 3:00 a.m. $\xrightarrow{3 \text{ hrs.}}$ 6:00 a.m.

Duration = 3 hours.

2. 6:30 p.m. and 9:20 p.m.

Soln: Starting time is 6:30 p.m.

Finishing time is 9:20 p.m.

Duration = 6:30 p.m. $\xrightarrow{30 \text{ min}}$ 7:00 p.m. $\xrightarrow{2 \text{ hrs}}$ 9:00 p.m. $\xrightarrow{20 \text{ min}}$ 9:20 p.m.
 $= 30 \text{ min} + 2 \text{ hrs} + 20 \text{ min}$
 $= 2 \text{ hrs } 50 \text{ min}$

3. 4:00 p.m. and 1:45 a.m.

Soln: Starting time = 4:00 p.m.

Finishing time = 1:45 a.m.

Duration = 4:00 p.m. $\xrightarrow{8 \text{ hrs}}$ 12:00 midnight $\xrightarrow{1 \text{ hr}}$ 1:00 a.m. $\xrightarrow{45 \text{ min}}$ 1:45 a.m.
 $= 8 \text{ hrs} + 1 \text{ hr} + 45 \text{ min} = 9 \text{ hrs } 45 \text{ min}$

B. Solve these story sums.

1. The school starts at 8:20 a.m. Ritu reaches the school at 8:05 a.m. How many min early does she reach her school?

Soln:- Starting time of school is 8:20 a.m.
 Finishing time of school is 8:05 a.m.
 Duration = 8:05 a.m. $\xrightarrow{15\text{min}}$ 8:20 a.m.

So, 15 min early Ritu reached her school.

2. A class test started at 9:05 a.m. and finished at 9:45 a.m. How many min. did it last?

Soln:- Starting time of class test = 9:05 a.m.
 Finishing " " " " = 9:45 a.m.
 Duration of the test = 9:05 a.m. $\xrightarrow{40\text{min}}$ 9:45 a.m.

So, The test lasts for 40 min.

3. A T-20 match started at 10:30 a.m. and ended at 2:15 p.m. How long did it last?

Soln:- Starting time of T-20 match = 10:30 a.m.
 Finishing " " " " = 2:15 p.m.
 Duration = 10:30 $\xrightarrow{30\text{min}}$ 11:00 a.m. $\xrightarrow{1\text{hr}}$ 12:00 noon $\xrightarrow{2\text{hrs}}$ 2:00 pm
 2:00 pm $\xrightarrow{15\text{min}}$ 2:15 p.m.

$$= 30\text{min} + 3\text{hrs} + 15\text{min}$$

$$= 3\text{hrs } 45\text{min}$$

So, the duration of the match is 3 hrs 45 min.

4. A cartoon show started at 7:05 p.m. But Chinu switched on the television only at 7:20 p.m. How many minutes of the cartoon show did he miss?

Soln:- Starting time of cartoon show = 7:05 p.m.
Chinu switched on the television at 7:20 p.m.

7:05 p.m. $\xrightarrow{15\text{min}}$ 7:20 p.m.

So, Chinu missed show for 15 min.

5. A movie started at 10:45 a.m. and got over at 1:05 p.m. How long was the movie?

Soln:- Starting time of a movie = 10:45 a.m.

Finishing time of a movie = 1:05 p.m.

Duration = 10:45 a.m. $\xrightarrow{15\text{min}}$ 11:00 a.m. $\xrightarrow{1\text{hr}}$ 12:00 noon

12:00 noon $\xrightarrow{1\text{hr}}$ 1:00 p.m. $\xrightarrow{5\text{min}}$ 1:05 p.m.

= 15 min + 1 hr + 1 hr + 5 min

= 2 hrs 20 min

Finishing time = Starting time + Duration.

Starting time = Finishing time - Duration.

Exercise 11.8

A. Find the time.

1. 20 min. after 1:30 p.m.

Finishing time = 1:30 p.m. + 20 min $\rightarrow$ 1:50 p.m.
= 1:50 p.m.

2. 15 min after 11:50 a.m.

Starting time = 11:50 a.m.

Finishing time = $11:50 \text{ a.m.} + 15 \text{ min} \rightarrow 12:00 \text{ noon}$
 $\xrightarrow{5 \text{ min}} 12:05 \text{ p.m.}$
 $= 12:05 \text{ p.m.}$

3. 20 min before 6:20 p.m.

Starting time = Finishing time - Duration

$= 6:20 \text{ p.m.} - 20 \text{ min} \rightarrow 6:00 \text{ p.m.}$
 $= 6:00 \text{ p.m.}$

B. Solve these story sums.

1. A bus left Delhi for Shimla at 5:00 a.m. It reached Shimla after 9 hours. At what time did the bus reach Shimla?

Soln: $\rightarrow$ Starting time = 5:00 a.m.

Duration = 9 hours

Finishing time = $5:00 \text{ a.m.} + 9 \text{ hrs} \rightarrow 2:00 \text{ p.m.}$

So, The bus reached Shimla at 2:00 p.m.

2. A flight left Mumbai at 10:40 a.m. and reached Guwahati after 2 hrs 40. At what time did it reach Guwahati?

Soln: $\rightarrow$ Starting time = 10:40 a.m.

Duration = 2 hrs 40 min

Flight reached at = $10:40 \text{ a.m.} \xrightarrow{20 \text{ min}} 11:00 \text{ a.m.} \xrightarrow{2 \text{ hrs}} 12:00 \text{ noon}$
 $\xrightarrow{1 \text{ hr}} 1:00 \text{ p.m.}$
 $\xrightarrow{20 \text{ min}} 1:20 \text{ p.m.}$
 $= 1:20 \text{ p.m.}$

Ans.

3 The school annual play was 1 hour 5 min long. If it ended at 6:30 p.m. at what time did it start?

Soln: Duration of the school annual play = 1 hr 5 min
Finishing time = 6:30 p.m.

Starting time = Finishing time - Duration.

$$= 6:30 \text{ p.m.} - 1 \text{ hr } 5 \text{ min}$$

$$= 6:30 \text{ p.m.} \xrightarrow{-1 \text{ hr}} 5:30 \text{ p.m.} \xrightarrow{-5 \text{ min}} 5:25 \text{ p.m.}$$

So, The school annual play starts at 5:25 p.m.

Exercise 11.9

Solve these story sums:-

1. The World Book Fair started on 5 January in Delhi. It ended on 13 January. For how many days it last?

Soln: → No. of days in January = 31 days
Starting Date = 5 January
Finishing Date = 13 January
No. of days for the fair = 9 days.

2. Reema had a fever and was absent from school from 25 Dec to 29th Dec. How many days did she miss school?

Soln:- Reema was absent from 25 Dec to 29 Dec

No. of days missed by Reema = 5 days.

3. Ahmad reached Chennai on the morning of 19 Oct. He left Chennai on 5th Nov. morning. How long did he stay in Chennai?

Soln:- No. of days in Oct. = $31 - 18 = 13$ days
No. of days in Nov = 5 days.

Total no. of days = $13 + 4 = 17$ days

4. Calculate the no. of days Ritu spent with her grandmother if she was with her from 15 Aug to 7 Sept.

Soln:- No. of days in Aug = 17 days.
" " " " Sept = 7 days.

Total no. of days = $17 + 7 = 24$ days.

So, Ritu spent 24 days with her grandmother.

5. Rohit enrolled for a dance course on 3 May. The course ended on 14 June. For how long did the course last?

Soln:- No. of days in May = 29 days.
" " " " June = 14 days

Total no. of days for course = 43 days