



Time

Exercise-1

1. 9 o' clock, half past two, quarter past seven, quarter to eleven

2.



Exercise-2

2. 4:00 a.m. 3. 3:15 p.m.
 4. 3 hours before 12:00 noon = 9:00 a.m. 5. 7:30 a.m.
 6. 5 hours after 12:00 noon = 5:00 p.m. 7. 10:45 a.m.

Exercise-3

1. (b) 10 minutes to 2 (c) quarter past 6 (d) quarter to 4
 (e) 5 minutes past 8 (f) half past 2

2. (b)



8:45

(c)



3:50

(d)



11:05

(e)



8:15

(f)



5:25

3. (a) 60 (b) 25 minutes past 5
 (c) 10 (d) 4:45 or quarter to 5

Exercise-4

1. (b) 9:05:18 (c) 1:45:40
 2. (a) 7:25:03 (b) 11:05:07 (c) 3:55:18



Exercise-5

1. (a) \because 1 hour = 60 minutes
 \therefore 9 hours = 9×60 minutes = 540 minutes
- (b) 7 hours = 7×60 minutes = 420 minutes
- (c) 16 hours = 16×60 minutes = 960 minutes
- (d) 2 hours = 2×60 minutes = 120 minutes
 \therefore 2 hours 45 minutes = $(120 + 45)$ minutes = 165 minutes
- (e) 10 hours = 10×60 minutes = 600 minutes
 \therefore 10 hours 15 minutes = $(600 + 15)$ minutes = 615 minutes
- (f) 13 hours = 13×60 minutes = 780 minutes
 \therefore 13 hours 25 minutes = $(780 + 25)$ minutes = 805 minutes
- (g) 4 hours = 4×60 minutes = 240 minutes
 $\frac{1}{2}$ hour = $\frac{1}{2} \times 60$ minutes = 30 minutes
 \therefore $4\frac{1}{2}$ hours = $(240 + 30)$ minutes = 270 minutes
- (h) 6 hours = 6×60 minutes = 360 minutes
 \therefore 6 hours 50 minutes = $(360 + 50)$ minutes = 410 minutes
- (i) 17 hours = 17×60 minutes = 1020 minutes
2. (a) 6 minutes = 6×60 seconds = 360 seconds
- (b) 7 minutes = 7×60 seconds = 420 seconds
 \therefore 7 minutes 10 seconds = $(420 + 10)$ seconds = 430 seconds
- (c) 10 minutes = 10×60 seconds = 600 seconds
 \therefore 10 minutes 50 seconds = $(600 + 50)$ seconds = 650 seconds
- (d) 17 minutes = 17×60 seconds = 1020 seconds
- (e) 20 minutes = 20×60 seconds = 1200 seconds
 \therefore 20 minutes 20 seconds = $(1200 + 20)$ seconds = 1220 seconds
- (f) 25 minutes = 25×60 seconds = 1500 seconds
 \therefore 25 minutes 5 seconds = $(1500 + 5)$ seconds = 1505 seconds
3. 5 hours 15 minutes = $(5 \times 60 + 15)$ minutes
= $(300 + 15)$ minutes = 315 minutes

Thus, Sachin batted for 315 minutes.

4. 4 hours = 4×60 minutes = 240 minutes

\therefore 4 hours 10 minutes = $(240 + 10)$ minutes = 250 minutes.

So, the match between Nadal and Federer lasted for 250 minutes.

5. Time taken by Amit = 245 minutes
 Time taken by Ratna = 3 hours 15 minutes
 = $(3 \times 60 + 15)$ minutes
 = $(180 + 15)$ minutes = 195 minutes.
- So, Ratna travelled faster as she took lesser time to reach Agra.
6. 30 minutes 25 seconds = $(30 \times 60 + 25)$ seconds
 = $(1800 + 25)$ seconds
 = 1825 seconds
- Thus, my mother spent 1825 seconds in the market.

Exercise-6

1. (a) 4 days = 4×24 hours = 96 hours (\because 1 day = 24 hours)
 (b) 11 days = 11×24 hours = 264 hours
 (c) 15 days = 15×24 hours = 360 hours
 (d) 30 days = 30×24 hours = 720 hours
 (e) 8 days = 8×24 hours = 192 hours
 \therefore 8 days 2 hours = $(192 + 2)$ hours = 194 hours
 (f) 9 days = 9×24 hours = 216 hours
 \therefore 9 days 5 hours = $(216 + 5)$ hours = 221 hours
 (g) 20 days = 20×24 hours = 480 hours
 \therefore 20 days 4 hours = $(480 + 4)$ hours = 484 hours
 (h) 6 days = 6×24 hours = 144 hours
 \therefore 6 days 5 hours = $(144 + 5)$ hours = 149 hours
 (i) 17 days = 17×24 hours = 408 hours
 \therefore 17 days 6 hours = $(408 + 6)$ hours = 414 hours
2. \because 2 days 3 hours = $(2 \times 24 + 3)$ hours = $(48 + 3)$ hours = 51 hours
 So, the train takes 51 hours to reach Hyderabad.
3. \because 5 days 12 hours = $(5 \times 24 + 12)$ hours = $(120 + 12)$ hours = 132 hours
 So, I spent 132 hours with my grandparents.
4. \because 6 days = 6×24 hours = 144 hours
 So, the letter reached to Rita's cousin in 144 hours.

Exercise-7

1. (a) 6 weeks = 6×7 days = 42 days. (\because 1 week = 7 days)
(b) 9 weeks = 9×7 days = 63 days
 \therefore 9 weeks 3 days = $(63 + 3)$ days = 66 days
(c) 12 weeks 2 days = $(12 \times 7 + 2)$ days = $(84 + 2)$ days = 86 days
2. Duration of school holidays = 8 weeks 2 days
= (8×7) days + 2 days
= 56 days + 2 days = 58 days

So, the school holidays are for 58 days.

Mental Maths Corner

1. (a) (ii) (b) (ii) (c) (ii) (d) (i)
2. (a) 12 (b) 12 (c) 180 (d) 2

Review Exercise

1. (a) 5 : 45 : 21
(b) 10 : 30 : 31
(c) 7 : 30 : 54

2.

1 day	24 hours	1440 minutes
$\frac{1}{2}$ day	12 hours	720 minutes
$\frac{1}{3}$ day	8 hours	480 minutes
$\frac{1}{4}$ day	6 hours	360 minutes

3. 8 a.m. to 12:00 noon = 4 hours
12:00 noon to 2:00 p.m. = 2 hours
Total time = $(4 + 2)$ hours = 6 hours

So, Anita spent 6 hours in school.

4. 3 days 11 hours = $(3 \times 24 + 11)$ hours = $(72 + 11)$ hours = 83 hours

So, Raja and his friends spent 83 hours on the project. Raja would take more time if he had to complete the project all alone. (less persons will take more time)

HOTS

Time spent by Adil is as follows :

(a) 2 weeks completing his homework

$$\text{Time} = 2 \text{ weeks} = 2 \times 7 \text{ days} = 14 \text{ days} = 14 \times 24 \text{ hours} = 336 \text{ hours}$$

(b) 16 hours playing with his friends

$$\text{Time} = 16 \text{ hours}$$

(c) 12 days visiting his grandparents

$$\text{Time} = 12 \text{ days} = 12 \times 24 \text{ hours} = 288 \text{ hours}$$

$$\therefore \text{Total time} = (336 + 16 + 288) \text{ hours} = 640 \text{ hours}$$

So, Adil spent 640 hours in all these activities.