

St. Andrews Scots School

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Session: 2025-2026

Class: V

Subject: Mathematics

Topic: Unit -12 (Time)

Ex-1 Q.1 (Book)

Q.2 a,c,f,i,j (Notebook)

Q.3 a (Notebook)

Q.4 c,b (Notebook)

Q.5 a,e,f (Notebook)

Ex-2 Q.1 b ; Q.2 a,c ; Q.3 a,c (Notebook)

Ex-3 Q.1 a,c,d; Q.2 b ; Q.3 a (Notebook)

Ex-4 Q.1,2,3

Mental Maths Corner (H.W)

Worksheet

Lesson-12 : Time

Warm Up

Mohit should take flight -4096 to reach Chennai on time.

Puzzle

0:12, 1:23, 2:34, 3:45, 4:56, 12:34

Exercise-1

1. (a) (i) 1 hour = 60 minutes, 1 minute = $\frac{1}{60}$ hour
- $$\begin{array}{r} 10 \text{ hours} \\ 60 \overline{) 636} \\ \underline{60} \\ 36 \\ \underline{30} \\ 6 \text{ minutes} \end{array}$$
- $\therefore 636 \text{ minutes} = (636 \div 60) \text{ hours}$
 $= 10 \text{ hours } 36 \text{ minutes}$
- (b) (iv) $\therefore 1 \text{ year} = 12 \text{ months}$
- $$\begin{array}{r} 4 \text{ years} \\ 12 \overline{) 54} \\ \underline{48} \\ 6 \text{ months} \end{array}$$
- $54 \text{ months} = (54 \div 12) \text{ years}$
 $= 4 \text{ years } 6 \text{ months}$
2. (a) $\therefore 1 \text{ day} = 24 \text{ hours}$
 $\therefore 8 \text{ days} = 8 \times 24 \text{ hours} = 192 \text{ hours.}$
 $8 \text{ days } 7 \text{ hours} = (192 + 7) \text{ hours} = 199 \text{ hours.}$
- (b) $15 \text{ hours } 24 \text{ minutes} = (15 \times 60 + 24) \text{ minutes}$
 $= (900 + 24) \text{ minutes} = 924 \text{ minutes}$
- (c) $16 \text{ minutes } 25 \text{ seconds} = (16 \times 60 + 25) \text{ seconds}$
 $= (960 + 25) \text{ seconds} = 985 \text{ seconds}$
- (d) $7 \text{ months } 3 \text{ weeks} = 7 \times 30 \text{ days} + 3 \times 7 \text{ days}$ (1 month = 30 days)
 $= 210 \text{ days} + 21 \text{ days}$ (1 week = 7 days)
 $= 231 \text{ days}$
- (e) $2 \text{ months } 4 \text{ days} = (2 \times 30 + 4) \text{ days}$
 $= 64 \text{ days}$
- (f) $2 \text{ years } 7 \text{ months} = (2 \times 12 + 7) \text{ months}$
 $= (24 + 7) \text{ months} = 31 \text{ months}$
- (g) 1 minute = 60 seconds, 1 second = $\frac{1}{60}$ minutes
- $$\begin{array}{r} 6 \text{ minutes} \\ 60 \overline{) 360} \\ \underline{360} \\ 0 \end{array}$$
- $\therefore 360 \text{ seconds} = (360 \div 60) \text{ minutes}$
 $= 6 \text{ minutes}$
- (h) $\therefore 1 \text{ day} = 24 \text{ hours}$
- $$\begin{array}{r} 2 \text{ days} \\ 24 \overline{) 55} \\ \underline{48} \\ 7 \text{ hours} \end{array}$$
- $55 \text{ hours} = (55 \div 24) \text{ days}$
 $= 2 \text{ days } 7 \text{ hours}$

- (i) $\therefore 1 \text{ year} = 365 \text{ days}$
- $$\begin{array}{r} 2 \text{ years} \\ 365 \overline{) 765} \\ \underline{730} \\ 35 \text{ days} \end{array}$$
- $765 \text{ days} = (765 \div 365) \text{ years}$
 $= 2 \text{ years } 35 \text{ days}$
- (j) $\therefore 1 \text{ month} = 4 \text{ weeks}$
- $$\begin{array}{r} 24 \text{ months} \\ 4 \overline{) 96} \\ \underline{8} \\ 16 \\ \underline{16} \\ 0 \end{array}$$
- $96 \text{ weeks} = (96 \div 4) \text{ months}$
 $= 24 \text{ months}$
3. (a) $14 \text{ hours } 15 \text{ minutes } 16 \text{ seconds}$
 $= (14 \times 60) \text{ minutes} + 15 \text{ minutes } 16 \text{ seconds}$
 $= 840 \text{ minutes} + 15 \text{ minutes } 16 \text{ seconds}$
 $= 855 \text{ minutes } 16 \text{ seconds}$
 $= (855 \times 60) \text{ seconds} + 16 \text{ seconds}$
 $= 51300 \text{ seconds} + 16 \text{ seconds}$
 $= 51316 \text{ seconds}$

4. (a) 5 weeks 4 days 10 hours = (5×7) days + 4 days 10 hours
 = 35 days + 4 days 10 hours
 = 39 days 10 hours
 = (39×24) hours + 10 hours
 = 936 hours + 10 hours
 = 946 hours
- (b) 6 weeks 7 hours = (6×7) days + 7 hours
 = 42 days + 7 hours
 = (42×24) hours + 7 hours
 = 1008 hours + 7 hours
 = 1015 hours
- (c) 4 weeks 6 days 23 hours = (4×7) days + 6 days 23 hours
 = 28 days + 6 days 23 hours
 = 34 days 23 hours
 = (34×24) hours + 23 hours
 = 816 hours + 23 hours = 839 hours

5. (a) 95 days = $(95 \div 30)$ months
 = 3 months 5 days
- $$\begin{array}{r} 30 \overline{) 95} \\ \underline{-90} \\ 5 \text{ days} \end{array}$$

- (b) 2700 seconds = $(2700 \div 60)$ minutes
 = 45 minutes
- $$\begin{array}{r} 60 \overline{) 2700} \\ \underline{-240} \\ 300 \\ \underline{-300} \\ 0 \end{array}$$

- (c) 625 hours = $(625 \div 24)$ days
 = 26 days 1 hour
- $$\begin{array}{r} 24 \overline{) 625} \\ \underline{-48} \\ 145 \\ \underline{-144} \\ 1 \text{ hour} \end{array}$$
- Now, we divide 26 days by 7 to convert into weeks.
- $$\begin{array}{r} 7 \overline{) 26} \\ \underline{-21} \\ 5 \text{ days} \end{array}$$
- 26 days = $(26 \div 7)$ weeks
 = 3 weeks 5 days
- Thus, 625 hours = 3 weeks 5 days 1 hour

- (d) 1268 minutes = $(1268 \div 60)$ hours
 = 21 hours 8 minutes
- $$\begin{array}{r} 60 \overline{) 1268} \\ \underline{-120} \\ 68 \\ \underline{-60} \\ 8 \text{ minutes} \end{array}$$

- (e) 3580 seconds = $(3580 \div 60)$ minutes
 = 59 minutes 40 seconds
- $$\begin{array}{r} 60 \overline{) 3580} \\ \underline{-300} \\ 580 \\ \underline{-540} \\ 40 \text{ seconds} \end{array}$$

- (f) 185 days = $(185 \div 30)$ months
 = 6 months 5 days
- $$\begin{array}{r} 30 \overline{) 185} \\ \underline{-180} \\ 5 \text{ days} \end{array}$$

Exercise-2

1. (a) (ii) 12 minutes 10 seconds + 16 minutes 50 seconds
= 29 minutes

In the seconds column,

$(10 + 50)$ seconds = 60 seconds = 1 minute

Carry over 1 to the minutes column and write 00 in the seconds column.

In the minutes column, $(1 + 12 + 16)$ minutes = 29 minutes

Minutes	Seconds
① 12	10
+ 16	50
<u>29</u>	<u>00</u>

- (b) (iii) Here, 23 seconds < 50 seconds

So, we borrow 1 minute = 60 seconds from 16 minutes leaving behind 15 minutes.

$(23 + 60)$ seconds = 83 seconds

Now, $(83 - 50)$ seconds = 33 seconds
 $(15 - 12)$ minutes = 3 minutes

Minutes	Seconds
①⑤ 16	⑧③ 23
- 12	50
<u>3</u>	<u>33</u>

2. (a) 3 hours 42 minutes + 12 hours 12 minutes
= 15 hours 54 minutes

Hours	Minutes
3	42
+ 12	12
<u>15</u>	<u>54</u>

- (b) 12 years 7 months + 18 months
= 14 years 1 month

Years	Months
② 12	7
+ 00	18
<u>14</u>	<u>01</u>

In the months column,
 $(7 + 18)$ months = 25 months
 = 24 months + 1 month
 = 2 years + 1 month
 write 1 in the months column and carryover 2 to the years column.

- (c) 9 days 14 hours + 5 days 12 hours
= 15 days 2 hours

Days	Hours
① 9	14
+ 5	12
<u>15</u>	<u>02</u>

In the hours column.
 $(14 + 12)$ hours = 26 hours.
 26 hours = 24 hours + 2 hours
 = 1 day + 2 hours
 write 2 in hours column and carryover 1 day to the days column.

Exercise-3

1. (a) (i) Rahul starts doing his homework at 05 : 30 p.m. or 17 : 30 hours.

He completes his homework after 1 hour 30 minutes.

So, we have to add 17 hours 30 minutes to 1 hour 30 minutes.

(30 + 30) minutes = 60 minutes = 1 hour

write 00 in the minutes column and

carryover 1 to the hours column.

(1 + 17 + 1) hours = 19 hours.

Hours	Minutes
①	
17	30
+ 1	30
19	00

So, we get, 19 hours 00 minutes = 19 : 00 hours = 07 : 00 p.m.

Rahul completes his homework at 07 : 00 p.m.

- (b) (iv) 06 : 30 p.m. = 18 : 30 hours,

The time 45 minutes before 18 : 30 hours

was 17 : 45 hours or 05 : 45 p.m.

Hours	Minutes
①7	②0
18	30
- 00	45
17	45

Since 30 minutes < 45 minutes, so, we borrow 1 hour from the hours column.

It reduces 18 hours to 17 hours. Also (30 + 60) minutes = 90 minutes.

- (c) (iii) Ms Gauri went to the market at 11 : 30 a.m. or 11 : 30 hours.

She returned after 2 hours 25 minutes.

So, we have to add 11 hours 30 minutes to

2 hours 25 minutes. We get, 13 hours 55 minutes.

Ms Gauri returned at 13 : 55 hours or

01 : 55 p.m. from the market.

Hours	Minutes
11	30
+ 2	25
13	55

- (d) (iv) First convert the time into 24 hour clock time.

09 : 50 a.m. = 09 : 50 hours = 9 hours 50 minutes

07 : 10 p.m. = 19 : 10 hours = 19 hours 10 minutes

Now subtracting 9 hours 50 minutes from

19 hours 10 minutes.

We get, 9 hours 20 minutes.

The time duration of Mrs Sharma's office is 9 hours 20 minutes.

Hours	Minutes
①8	②0
19	10
- 9	50
9	20

2. (a) First convert the time into 24 hour clock time.

07 : 30 a.m. = 07 : 30 hours

Now arrange the units columnwise and add.

We get, 13 hours 44 minutes.

convert it into 12 hour clock time.

13 : 44 hours = 13 : 44 - 12 : 00 = 1 : 44 p.m.

The time 6 hours 14 minutes after 7 : 30 a.m. will be 01 : 44 p.m.

Hours	Minutes
7	30
+ 6	14
13	44

- (b) 12 : 00 noon = 12 : 00 hours

The time 3 hours 12 minutes after

12 : 00 hours will be 15 : 12 hours

or 03 : 12 p.m.

Hours	Minutes
12	00
+ 3	12
15	12

3. (a) First convert the time into 24 hour clock time

1 : 00 p.m. = 13 : 00 hours.

Now subtract 1 hour 25 minutes from it.

In the minutes column, $00 < 25$

So, we borrow 1 hour from the hours column.

It reduces 13 hours to 12 hours.

Also, $(00 + 60)$ minutes = 60 minutes

Now subtracting, $(60 - 25)$ minutes = 35 minutes

$(12 - 1)$ hours = 11 hours

So, the time 1 hour 25 minutes before 1.00 p.m. was 11 : 35 hours or 11 : 35 a.m.

Hours	Minutes
<u>12</u>	<u>60</u>
13	00
- 1	25
<u>11</u>	<u>35</u>

- (b) 12 midnight = 00 : 00 hours = 24 : 00 hours

Since 00 minutes < 55 minutes.

So, we borrow 1 hour from hours column

leaving 23 hours.

Also, $(60 + 00)$ minutes = 60 minutes

Now subtracting 2 hours 55 minutes from 23 hours 60 minutes.

we get, 21 : 05 hours = 09 : 05 p.m

So, the time 2 hours 55 minutes before 12 midnight was 09 : 05 p.m.

Hours	Minutes
<u>23</u>	<u>60</u>
24	00
- 2	55
<u>21</u>	<u>05</u>

Exercise-4

1. (a) (ii) Number of days from 12th May to 31st May = 20

Number of days from 1st June to 23rd June = 23

Total number of days = $20 + 23 = 43$

Thus, the school remain closed for 43 days.

- (b) (ii) Period from 14th March to 31st March = 18 days

Period from 1st April to 30th April = 30 days

Period from 1st May to 26th May = 26 days

Total number of days = $(18 + 30 + 26) = 74$

Thus, Divya's father was on official tour for 74 days.

2. Gaurav started the project on 15th August (Independence Day).

Number of days from 15th August to 31st August = 17

(both dates included)

So, Gaurav finished the project on 31st August.

3. Number of days for which Anurag was in Pune in June

$$= 30 - 9 = 21$$

(10th is included)

Number of days in July = 31

Number of days in August = $56 - (21 + 31) = 56 - 52 = 4$

Thus, Anurag came back home on 5th August.

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