

SESSION : 24 CLASS : IV

SUBJECT: MATHEMATICS

CHAPTER NUMBER: 15

CHAPTER NAME : TIME AND CALENDAR

SUBTOPIC : OPERATIONS ON TIME MEASURES,

EX-15 D Q.NO. 1 TO 6

CHANGING YOUR TOMORROW

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LEARNING OBJECTIVE



 Enable the students to understand about the operations on time measures.



Sec.

50

40

90

Example: 1 Add 10 minutes 50 seconds and 15 minutes 40 seconds.

Solution:

Step 1: Add the seconds first. 50 + 40 = 90 seconds

90 sec = 60 sec + 30 sec = 1 minute 30 sec.

Write the 30 under the second's column and carry over 1 to minute's column.

Min.	Sec.
1	
1 0	50
+ 15	40
2 6	30

Step 2:	Add the minutes. 10 + 15 + 1(carry over) =
	= 26 minutes

Write 26 under the minute's column.



Ans. 26 minutes 30 seconds

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Min.

Example: 2 Add 3 hours 40 minutes 20 seconds, 6 hours 24 minutes 30 seconds and 7 hours 30 minutes 40 seconds.

Solution:

Step 2:

Step 1: Add the sec. 20 + 30 + 40 = 90 seconds $90 \sec = 60 \sec + 30 \sec = 1 \min 30 \sec$.

carry over 1 to minute's column.

Add the minutes. 40 + 24 + 30 + 1(carry over)

Write the 30 under the second's column and

95 min. = 60 min + 35 min = 1 hour 35 min.

Write 35 under the minute's column and carry over 1 to the hour's column.

Step 3: Add the hours. 3 + 6 + 7 + 1(carry over) = 17 Hr Write t17 hours the under hour's column.

40 24 Min. Sec. 30 95 4 0 20 2 4 30 Sec. 20 3 0 40 30 40 3 5 **30**



90

Ans. 17 Hr 35 Min 30 Sec

Hr.

6

17

Example: 3	Add 4 days 16 hours 40 minutes, 3 days 10 hours 20 minutes and 10
	days 20 hours 10 minutes.

hour

So	luti	on

Step 1:

Step 2:

Step 3:

Solution:	uays 20 flours 10 fillifutes.								
						d.	hr	min.	

	16	
	10	
+	20	
	47	
	min.	
	40	
	20	

10

Add the minutes.
$$40 + 20 + 10 = 70 \text{ min}$$

70 min = 60 min + 10 min = 1 hour 10.

our	10	

20

23

47 Hr. = 24 hr + 23 hr = 1 day 23 hr.

Add the hours. 16 + 10 + 20 + 1(carry over)



Add the days. 4 + 3 + 10 + 1(carry over) = 18 days

10

18

Min.

75

24

51

sec.

75

Example: 4 Find the difference between 8 hours 16 minutes 15 seconds and 6 hours 24 minutes 30 seconds.

Step 2:

Solution: Hr. Start with seconds. Since 15<30, borrow 1 min Step 1:

1 min + 15 sec. = 75 seconds. 75 - 30 = 45 seconds.

5<24. borrow 1 hour from 8 hours. (60 + 15) -
24 = 51 minutes. [: 1 hour = 60 minutes]

subtract the hours. 7 - 6 = 1 hour Step 3:

[8 hour have become 7 hours since we borrowed 1 hour.

15 minutes since we borrowed 1 minute, 1

Min. Sec. 8 16 15

24 30 6 subtract the minutes. 16 minutes have become

5 1 45

30 45



Ans. 1 hour 51 minutes 45 seconds



EXERCISE - 15(D)

Try to add orally.

- 1. 20 minutes + 50 minutes + 10 minutes. = 80 minutes or 1 hour 20 minutes
- 2. 10 seconds + 40 seconds + 32 seconds. = **82 seconds** or **1 minute 22 seconds**
- 3. 16 minutes 20 seconds + 20 minutes 35 seconds. = **36 minutes 55 seconds**
- 4. 10 minutes 16 seconds + 16 minutes 24 seconds + 12 minutes 45 seconds.
 - = 39 minutes 25 seconds



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EXERCISE - 15(D)

5. add

a)	Hours	minutes	seconds
	1	1	
	14	20	15
	16	45	45
_	+ 6	30	30
	37	36	30



	Sec.	
	15	
	45	
+	30	
	90	

90 sec = 60 sec + 30 sec = 1 minute 30 sec.

	min.	
	1	
	20	
	45	
+	30	
	96	

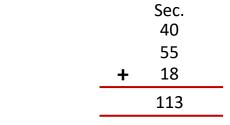
96 min = 60 min + 36 min = 1 hour 36 min.

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EXERCISE - 15(D)

5. add

b) Houi	rs minutes	seconds
1	1	
6	50	40
7	35	55
+ 8	20	18
22	46	53



113 sec = 60 sec + 53 sec = 1 minute 53 sec.

min. 1 50 35 + 20



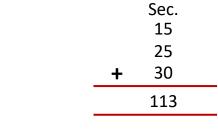


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EXERCISE - 15(D)

5. add

c)	Hours	minutes	seconds
	1	1	
	14	20	15
	8	45	25
	+ 6	30	30
	29	36	10



70 sec = 60 sec + 10 sec = 1 minute 10 sec.

	min.	
	1	
	20	
	45	
+	30	
	96	

96 min = 60 min + 36 min = 1 hour 36 min.

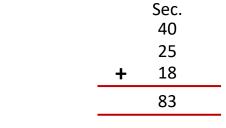


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EXERCISE - 15(D)

5. add

d)	Hours	minutes	seconds
	1	1	
	16	25	40
	17	35	25
	+ 8	12	18
	42	13	23



83 sec = 60 sec + 23 sec = 1 minute 23 sec.

	min.	
	1	
	25	
	35	
+	12	
	73	

73 min = 60 min + 13 min = 1 hour 13 min.





EXERCISE - 15(D)

6. Subtract

a)	Hours	minutes	seconds
	9	16	24
_	- 8	05	14
_	1	11	10





EXERCISE - 15(D)

6. Subtract

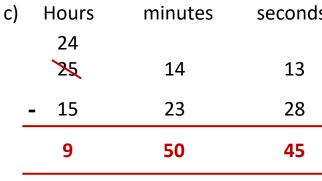
b)	Hours	minutes	seconds
	16	56	45
_	- 4	23	13
_	12	33	32

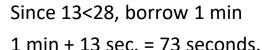


EXERCISE - 15(D)

6. Subtract

c)	Hours	minutes	seconds
	24		
	25	14	13
_	- 15	23	28
	9	50	45





Sec.
73
- 28
45

14 minutes have become 13 minutes since we borrowed 1 minute. 13<23. borrow 1 hour = 60 + 13 = 73 minutes.

	min.	
	73	
-	23	
	50	

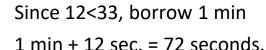


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EXERCISE – 15(D)

6. Subtract

d)	Hours	minutes	seconds
	7	22	42
	8	23	12
_	- 5	45	33
_	2	37	39



Sec.
72
_ 33
39

23 minutes have become 22 minutes since we borrowed 1 minute. 22<45. borrow 1 hour = 60 + 22 = 82 minutes.

m	in.
8	32
- 4	! 5
3	37





HOME ASSIGNMENT:

➢ Complete Exercise − **15 Q.NO. 1 TO 6 in your note book.**

LEARNING OUTCOME:



Students are able to understand the operations on time measures.



THANKING YOU ODM EDUCATIONAL GROUP