



NAME: \_\_\_\_\_  
CLASS: \_\_\_ 5 \_\_\_ DIV : \_\_\_\_\_  
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DATE: \_\_\_\_\_  
SUBJECT: MATH  
LESSON- L-2

PRE ACTIVITY – Lets get started page no. 94

**Exercise 2A**

**1. Convert the following into seconds.**

**Solution:**

- a. 12 minutes  
1 minute = 60 seconds  
12 minutes =  $12 \times 60 = 720$  seconds
- b. 38 minutes  
1 minute = 60 seconds  
38 minutes =  $38 \times 60 = 2280$  seconds
- c. 5 minutes 30 seconds  
1 minutes = 60 seconds  
5 minutes =  $5 \times 60 = 300$  seconds  
5 minutes 30 seconds =  $300 + 30 = 330$  seconds
- d. 17 minutes  
1 minute = 60 seconds  
17 minutes =  $17 \times 60 = 1020$  seconds
- e. 4 hours  
1 hours = 3600 seconds  
4 hours =  $4 \times 3600 = 14,400$  seconds
- f. 8 hours  
1 hours = 3600 seconds  
8 hours =  $8 \times 3600 = 28,800$  seconds

**2. Convert the following into minutes.**

**Solution:**

- a. 120 seconds  
We know, 60 seconds = 1 minute  
So, to find minutes in 120 seconds, we will divide 120 by 60.  
Thus, 120 seconds = 2 minutes
- b. 360 seconds  
We know, 60 seconds = 1 minute  
So, to find minutes in 360 seconds, we will divide 360 by 60.  
Thus, 360 seconds = 6 minutes
- c. 840 seconds  
We know, 60 seconds = 1 minute  
So, to find minutes in 840 seconds, we will divide 840 by 60.  
Thus, 840 seconds = 14 minutes
- d. 8 hours  
1 hour = 60 minutes  
8 hours =  $8 \times 60 = 480$  minutes

- e. 6 hours 12 minutes  
1 hour = 60 minute  
6 hours =  $6 \times 60 = 360$  minutes  
6 hours 12 minutes =  $360 + 12 = 372$  minutes
- f. 12 hours  
1 hours = 60 minutes  
12 hours =  $12 \times 60 = 720$  minutes

**3. Convert the following into minutes and seconds.**

**Solution:**

- a. 950 seconds

We know, 60 seconds = 1 minute  
So, to find minutes in 950 seconds, we will divide 950 by 60.  
 $950 \div 60 = \text{Quotient} = 15; \text{Remainder} = 50$   
Hence, 950 seconds = 15 minutes 50 seconds

- b. 105 seconds

We know, 60 seconds = 1 minute  
So, to find minutes in 105 seconds, we will divide 105 by 60.  
 $105 \div 60 = \text{Quotient} = 1; \text{Remainder} = 45$   
Hence, 105 seconds = 1 minutes 45 seconds

- c. 297 seconds

We know, 60 seconds = 1 minute  
So, to find minutes in 297 seconds, we will divide 297 by 60.  
 $297 \div 60 = \text{Quotient} = 4; \text{Remainder} = 57$   
Hence, 297 seconds = 4 minutes 57 seconds

- d. 450 seconds

We know, 60 seconds = 1 minute  
So, to find minutes in 450 seconds, we will divide 450 by 60.  
 $450 \div 60 = \text{Quotient} = 7; \text{Remainder} = 30$   
Hence, 450 seconds = 7 minutes 30 seconds

**4. Aditi was painting for 180 minutes. How many hours did she paint for?**

**Solution:**

1 hour = 60 minutes  
To find hours in 180 minutes we need to divide 180 by 60  
 $180 \div 60 = 3$   
Aditi painted for 3 hours.

- e. 824 seconds

We know, 60 seconds = 1 minute  
So, to find minutes in 824 seconds, we will divide 824 by 60.  
 $824 \div 60 = \text{Quotient} = 13; \text{Remainder} = 44$   
Hence, 824 seconds = 13 minutes 44 seconds

- f. 128 seconds

We know, 60 seconds = 1 minute  
So, to find minutes in 128 seconds, we will divide 128 by 60.  
 $128 \div 60 = \text{Quotient} = 2; \text{Remainder} = 8$   
Hence, 128 seconds = 2 minutes 8 seconds

**Exercise 2B****1. Add the following.****Solution:**

a.  $7 \text{ h } 15 \text{ min} + 26 \text{ min}$

	h	min
	7	15
+		26
-----	7	41

$7 \text{ h } 15 \text{ min} + 26 \text{ min} = 7 \text{ h } 41 \text{ min}$

b.  $9 \text{ h } 46 \text{ min} + 1 \text{ h } 37 \text{ min}$

	h	min
	9	46
+	1	37
-----	11	23

$9 \text{ h } 46 \text{ min} + 1 \text{ h } 37 \text{ min} = 11 \text{ h } 23 \text{ min}$

c.  $6 \text{ min } 30 \text{ s} + 2 \text{ min } 30 \text{ s}$

	min	s
	6	30
+	2	30
-----	9	00

$6 \text{ min } 30 \text{ s} + 2 \text{ min } 30 \text{ s} = 9 \text{ min}$

d.  $4 \text{ years } 3 \text{ months} + 5 \text{ years } 11 \text{ months}$

	years	month
	4	03
+	5	11
-----	10	02

$4 \text{ years } 3 \text{ months} + 5 \text{ years } 11 \text{ months} = 10 \text{ years } 2 \text{ months}$

**2. Subtract the following.****Solution:**

a.  $6 \text{ h } 30 \text{ min} - 2 \text{ h } 50 \text{ min}$

	h	min
	6	30
-	2	50
-----	3	40

$6 \text{ h } 30 \text{ min} - 2 \text{ h } 50 \text{ min} = 3 \text{ h } 40 \text{ min}$

b.  $40 \text{ min } 30 \text{ s} - 10 \text{ min } 40 \text{ s}$

	min	s
	40	30
-	10	40
-----	29	50

$40 \text{ min } 30 \text{ s} - 10 \text{ min } 40 \text{ s} = 29 \text{ min } 50 \text{ sec}$

c.  $7 \text{ h } 20 \text{ s} - 2 \text{ h } 30 \text{ s}$

	h	min	s
	7	00	20
-	2	00	30
-----	4	59	50

$7 \text{ h } 20 \text{ s} - 2 \text{ h } 30 \text{ s} = 4 \text{ h } 59 \text{ min } 50 \text{ sec}$

d.  $5 \text{ years } 3 \text{ months} - 4 \text{ months}$

	years	months
	5	03
-	0	04
-----	4	11

$5 \text{ years } 3 \text{ months} - 4 \text{ months} = 4 \text{ years } 11 \text{ months}$

**3. Answer the following.**

- a. Chitra drove for 3 hours 10 minutes to reach Agra from Delhi. She then drove for another 2 hours 45 minutes to reach home. How much time did she take to drive from Delhi to her home?

**Solution:**Time from Delhi to her home =  $3 \text{ h } 10 \text{ min} + 2 \text{ h } 45 \text{ min}$ 

	h	min
	3	10
+	2	45
-----	5	55

Chitra drove 5 h 55 min from Delhi to her home.

- b. Aamir's mother takes 1 hour 49 minutes to cook spaghetti and sauce. If she takes 51 minutes to prepare the sauce, find the time that she takes to prepare spaghetti.

**Solution:**

Time to prepare the spaghetti = 1 h 49 min – 51 min

$$\begin{array}{r}
 \text{h} \quad \text{min} \\
 1 \quad 49 \\
 - \quad \quad 51 \\
 \hline
 \quad \quad 58
 \end{array}$$

Aamir's mother takes 58 min to prepare the spaghetti.

- c. Raju and Himanshu are reading the same book. Raju completed the book in 40 min 30 s, whereas Himanshu took 51 min 15 s to complete the book. How much more time did Himanshu take compared to Raju to complete the book?

**Solution:**

Time taken by Raju = 40 min 30 s

Time taken by Himanshu = 51 min 15 s

More time taken by Himanshu = 51 min 15 s – 40 min 30 s

$$\begin{array}{r}
 \text{min} \quad \text{s} \\
 51 \quad 15 \\
 - 40 \quad 30 \\
 \hline
 10 \quad 45
 \end{array}$$

Himanshu took 10 min 45 sec more to complete the book than Raju.

- d. Heena is 12 years 4 months old and her sister is 5 years 8 months old. How much older is Heena than her sister?

**Solution:**

Heena's age = 12 years 4 months

Heena's sister age = 5 years 8 months

Difference in Heena's and her sister's age

= 12 years 4 months – 5 years 8 months

= 6 years 8 months

Heena is 6 years 8 months older than her sister.

## Exercise 2C

1. Write the finishing time using a.m. or p.m.

**Solution:**

- a. 2 hours after 1:30 p.m.

Starting time + Elapsed time = Finishing time

$$1 : 30 \text{ p.m.} + 2 \text{ h} = 3 : 30 \text{ p.m.}$$

- b. 3 hours 45 min after 10:20 a.m.

Starting time + Elapsed time = Finishing time

$$10 : 20 \text{ a.m.} + 3 \text{ h } 45 \text{ min} = 2 : 05 \text{ p.m.}$$

c. 5 hours 10 min after 6 p.m.

Starting time + Elapsed time = Finishing time

$$6 \text{ p.m.} + 5 \text{ h } 10 \text{ min} = 11 : 10 \text{ p.m.}$$

d. 2 hours 10 min after 12 noon

$$12 : 00 \text{ p.m.} + 2 \text{ h } 10 \text{ min} = 2 : 10 \text{ p.m.}$$

2. Write the elapsed time in a.m. or p.m.

**Solution:**

a. 5:45 p.m. to 6:20 p.m.

Finishing time – Starting time = Elapsed time

$$6 : 20 \text{ p.m.} - 5 : 45 \text{ p.m.} = 35 \text{ min}$$

b. noon to 4:55 p.m.

Finishing time – Starting time = Elapsed time

$$4 : 55 \text{ p.m.} - 12 : 00 \text{ p.m.} = 4 \text{ h } 55 \text{ min}$$

c. 3:25 a.m. to 4:10 a.m.

Finishing time – Starting time = Elapsed time

$$4 : 10 \text{ a.m.} - 3 : 25 \text{ a.m.} = 45 \text{ min}$$

d. 11:20 a.m. to 2:35 p.m.

Finishing time – Starting time = Elapsed time

$$2 : 35 \text{ p.m.} - 11 : 20 \text{ a.m.} = 3 \text{ h } 15 \text{ min}$$

3. Write the starting time using a.m. or p.m.

**Solution:**

a. 3 hours before 2:05 p.m.

Finishing time – Elapsed time = Starting time

$$2 : 05 \text{ p.m.} - 3 \text{ h} = 11 : 05 \text{ a.m.}$$

b. 6 hours 10 min before 9:10 p.m.

Finishing time – Elapsed time = Starting time

$$9 : 10 \text{ p.m.} - 6 \text{ h } 10 \text{ min} = 3 \text{ p.m.}$$

c. 5 hours 15 min before 11 a.m.

Finishing time – Elapsed time = Starting time

$$11 \text{ a.m.} - 5 \text{ h } 15 \text{ min} = 5 : 45 \text{ a.m.}$$

d. 2 hours before 12:10 p.m.

Finishing time – Elapsed time = Starting time

$$12 : 10 \text{ p.m.} - 2 = 10 : 10 \text{ a.m.}$$

**4. Answer the following.**

- a. An engineer starts his work at 8:15 a.m. He usually works for 8 hours. Today, he plans to leave his office half an hour early. What time does he plan to leave his office?**

**Solution:**

The engineer starts work = 8 : 15 a.m.

Work duration of today = 8 h – 30 minutes = 7 h 30 min

Starting time + Elapsed time = Finishing time

8 : 15 a.m. + 7 h 30 min = 3 : 45 p.m.

Therefore, the engineer plans to leave his office at 3 : 45 p.m.

- b. Mr. Khan takes 2 hours 40 minutes to drive from Delhi to Manesar. He arrives at Manesar at 2:25 p.m. What time did he start from Delhi?**

**Solution:**

Finishing time – Elapsed time = Starting time

2 : 25 p.m. – 2 h 40 min = 11 : 45 a.m.

Therefore, he starts at 11 : 45 a.m. from Delhi.

- c. Iqbal finished his cycle ride at 4:35 p.m. He cycled for 2 hours 20 minutes. What time did he begin cycling?**

**Solution:**

Finishing time – Elapsed time = Starting time

4 : 35 p.m. – 2 h 20 min = 2 : 15 p.m.

Therefore, Iqbal begins cycling at 2 : 15 p.m.

- d. Raghav went to Paris on 3rd August and stayed there for 21 days. On what date did he come back?**

**Solution:**

Starting date + Duration = Finishing date

3<sup>rd</sup> August + 21 days = 24 August (Add 21 days to 3)

Therefore, Raghav comes back on 24<sup>th</sup> August.

- e. A cartoon series ended on 31st October. It lasted for 25 days. On what date did it begin?

**Solution:**

Finishing date – Duration = Starting date

31<sup>st</sup> October – 25 = 6<sup>th</sup> October (Subtract 25 from 31)

Therefore, cartoon series begins on 6<sup>th</sup> October

### Exercise 2D

1. Circle the temperature that matches the situation.

**Solution:**

- a. Hot day 21 °C or 45 °C  
b. Ice cream 32 °C or 12 °C  
c. Pleasant day 42 °C or 25 °C  
d. Feverish body 40 °C or 37 °C

2. Write the temperature for the following questions.

**Solution:**

- a. 15 °C more than 20 °C  
 $15\text{ °C} + 20\text{ °C} = 35\text{ °C}$   
b. 13 °C less than 45 °C  
 $45\text{ °C} - 13\text{ °C} = 32\text{ °C}$   
c. 30 °C warmer than 12 °C  
 $12\text{ °C} + 30\text{ °C} = 42\text{ °C}$   
d. 15 °C cooler than 41 °C  
 $41\text{ °C} - 15\text{ °C} = 26\text{ °C}$

3. When the temperature rises by 20 °C from 14°C, it becomes 34 °C.

**Solution:**

$$14\text{ °C} + 20\text{ °C} = 34\text{ °C}$$

4. Yesterday's temperature was 18 °C. Today it rose by 3 °C. What is the temperature today?

**Solution:**

$$\text{Today's temperature} = 18\text{ °C} + 3\text{ °C} = 21\text{ °C}$$

Therefore, the temperature today is 21 °C

5. On Sunday, the highest temperature was 19°C. On Monday, it was 22°C. By how much has the temperature increased? Has it become cooler or hotter?

**Solution:**

$$\text{Change in temperature} = 22\text{ }^{\circ}\text{C} - 19\text{ }^{\circ}\text{C} = 3\text{ }^{\circ}\text{C}$$

The temperature has increased by 3 °C and it becomes hotter on Monday than Sunday.

POST ACTIVITY : Solve puzzle page no. 103

Teacher

H.O.D

Co-ordinator

Principle









