SESSION : 22
CLASS : IV
SUBJECT : MATHEMATICS
CHAPTER NUMBER : 15
CHAPTER NAME : TIME AND CALENDAR
SUBTOPIC : CONVERSION OF TIME,
EXPLANATION, EX-15 C Q.NO. 1 TO 4

- **Enable the students to understand how to convert the time.**

60 seconds = 1 minute

60 minutes = 1 hour

24 hour = 1 day

Example : 1   Convert 15 minutes 20 seconds into seconds.

Solution :   1 minute   =   60 sec.

15 minutes 20 sec.   =   15 × 60 + 20

=   900 + 20

=   **920 sec**.

CONVERSION OF TIME

Example : 2   Convert 8 hours 12 minutes into minutes.

Solution :   1 hour   =   60 minutes.

8 hours 12 minutes.   8 × 60 + 12

=

=   480 + 12

=   **492 minutes**.

Example : 3 Convert 125 seconds into minutes and seconds.

Solution :   60 seconds = 1 minutes.

125 seconds = 125 ÷ 60

```
          2
= 60 ) 1  2  5
     -  1  2  0
        ─────────
              5
```

Here, the **quotient 2** denotes the minutes and **remainder 5** represents the seconds.

And. 2 minutes 5 seconds

CONVERSION OF TIME

Example : 4   Convert into hours

a) 7 days   b) 2 days 8 hours

Solution :   a)   1 day = 24 hour.

7 days = 7 × 24 =   **168 hours**.

b)   1 day = 24 hour.

2 days 8 hours =   2 × 24 + 8

=   48 + 8

=   **56 hours**.

CONVERSION OF TIME

Example : 5   Convert 842 minutes into hours and minutes.

Solution :   60 minutes   =   1 hour.

842 minutes   =   842 ÷ 60   = 60) 8 4 2 (1 4

```
        1   4
   60 ) 8  4  2
      - 6  0
        2  4  2
      - 2  4  0
              2
```

Here, the **quotient 14** represents hours and **remainder 2** represents the minutes.

And. 14 hours 2 minutes

CONVERSION OF TIME

Example : 6   Convert 5,248 seconds into hours, minutes and seconds.

Solution :   Step 1 : First convert seconds into minutes.
60 seconds = 1 minute

5,248 seconds = 5248 ÷ 60 minutes
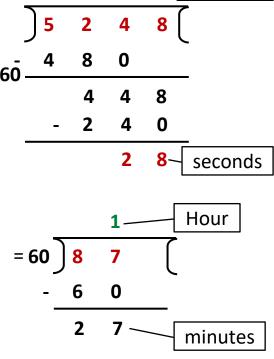
87 minutes 28 seconds

Step 2 : Now, convert 87 minutes into hour
(87 minutes is more than 60 minute, we can convert it into hours and minutes.)

60 minutes = 1 hour

87 minutes = 87 ÷ 60 =

1 hour 27 minutes

And. 5,248 seconds = 1 hour 27 min 28 sec

```
            8   7 ─ minutes
      ) 5   2   4   8 (
  -   4   8   0
60  ─────────────
          4   4   8
      -   2   4   0
      ─────────────
              2   8 ─ seconds


            1 ─ Hour
   = 60 ) 8   7 (
      -  6   0
      ─────────
         2   7 ─ minutes
```

Exercise-15(C)

1. Convert into hours.

a)   8 days

　　　1 day = 24 hours.

　　　8 days = 8 × 24

　　　　　　= **192 hours**.

b)   5 days 10 hours

　　　1 day = 24 hours.

5 days 10 hours = 5 × 24 + 10

　　　　　　= 120 + 10

　　　　　　= **130 hours**.

CONVERSION OF TIME

Exercise-15(C)

1. Convert into hours.

c)   10 days 20 hours

1 day = 24 hours.

10 days 20 hours = 10 × 24 + 20

= 240 + 20

= **260 hours**.

d)   6 days 2 hours

1 day = 24 hours.

6 days 2 hours = 6 × 24 + 2

= 144 + 2

= **146 hours**.

Exercise-15(C)

2. Convert into minutes.

a) 3 hour

1 hour = 60 minutes.

3 hour = 3 × 60

= **180 minutes**.

b) 2 hours 6 minutes

1 hour = 60 minutes.

2 hour 6 minutes = 2 × 60 + 6

= 120 + 6

= **126 minutes**.

CONVERSION OF TIME

Exercise-15(C)

2. Convert into minutes.

c)   8 hours 40 minutes

           1 hour = 60 minutes.

   8 hours 40 minutes = 8 × 60 + 40

                     = 480 + 40

                     = **520 minutes**.

d)   15 hours 30 minutes

           1 hour = 60 minutes.

   15 hours 30 minutes = 15 × 60 + 30

                     = 900 + 30

                     = **930 minutes**.

Exercise-15(C)

3. Convert into seconds.

a) 6 minutes

   1 minute = 60 seconds.

   6 minutes = 6 × 60

   = **360 seconds**.

b) 2 minutes 4 seconds

   1 minute = 60 seconds.

   2 minutes 6 seconds = 2 × 60 + 4

   = 120 + 4

   = **124 seconds**.

CONVERSION OF TIME

Exercise-15(C)

3. Convert into seconds.

c)   40 minutes 30 seconds

   1 minute = 60 seconds.

40 minutes 30 seconds = 40 × 60 + 30

   = 2400 + 30

   = **2430 seconds**.

d)   1 hour 2 minutes 30 seconds

   1 hour = 60 minutes.

1 hour 2 minutes = 1 × 60 + 2

   = 60 + 2

   = 62 minutes.

   1 minute = 60 seconds.

62 minutes 30 seconds = 62 × 60 + 30

   = 3720 + 30

   = **3750 seconds**.

Exercise-15(C)

4. Convert into minutes and seconds.

a) 450 seconds

60 seconds = 1 minutes.

450 seconds = 450 ÷ 60

```
                    7
    = 60 ) 4   5   0
         -  4   2   0
            _____
               3   0
```

Here, the **quotient 7** denotes the minutes and **remainder 30** represents the seconds.

And. 7 minutes 30 seconds

Exercise-15(C)

4. Convert into minutes and seconds.

b) 540 seconds

60 seconds = 1 minutes.

540 seconds = $540 \div 60$

$$
= 60 \overline{)\,540\,} \quad 9
$$

```
           9
  = 60 ) 5  4  0
      -  5  4  0
         ───────
            0  0
```

Here, the **quotient 9** denotes the minutes and **remainder 0** represents the seconds.

And. 9 minutes.

Exercise-15(C)

4. Convert into minutes and seconds.

c)   900 seconds

60 seconds = 1 minutes.

900 seconds = 900 ÷ 60   = 60) 9 0 0   (1 5

        - 6 0
        _____
           3 0 0
        - 3 0 0
        _____
              0

Here, the **quotient 15** represents minutes and **remainder 0** represents the seconds.

And. 15 minutes

CONVERSION OF TIME

Exercise-15(C)

4. Convert into minutes and seconds.

        d)   1006 seconds

        60 seconds = 1 minutes.

      1006 seconds = 1006 ÷ 60   = **60**

```
        1  6
   60 ) 1  0  0  6
      -  6  0
      ----------
         4  0  6
      -  3  6  0
      ----------
            4  6
```

Here, the **quotient 16** represents minutes and **remainder 46** represents the seconds.

      And. 16 minutes 46 seconds

HOME ASSIGNMENT:

➢ **Complete Exercise – 15 C Q.NO. 1 to 4 in your note book.**

LEARNING OUTCOME:

Students are able to understand how to convert the time.

THANKING YOU
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