

CLASS: 5

MATHS

VIDEO: 2

Ch. 13. TIME [Conversion of Units of Time]:-

These are the measures of time.

- a) 1 day = 24 hours
- b) 1 hour = 60 minutes
- c) 1 minute = 60 seconds
- d) 1 week = 7 days
- e) 1 month = 30 days
- f) 1 year = 12 months = About 52 weeks
- g) 1 year = 365 days
- h) 1 leap year = 366 days
- i) 1 decade = 10 years
- j) 1 century = 100 years
- k) 1 month = About 4 weeks

Rule (1): We multiply to convert larger units into smaller units.

Rule (2): We divide to convert smaller units into larger units.

NOTE: → While converting smaller units into larger units, if a remainder is there, then retain it as the smaller unit.

8. A. (1) Convert 10 hours into minutes

Solution

$$\begin{aligned} \because 1 \text{ hour} &= 60 \text{ minutes} \\ \therefore 10 \text{ hours} &= 60 \times 10 \text{ minutes} \\ &= 600 \text{ minutes Ans} \end{aligned}$$

8. A. (4) Convert 12 hrs 13 min into minutes. Solution

$$\begin{aligned} \because 1 \text{ hour} &= 60 \text{ minutes} \\ \therefore 12 \text{ hours} &= 60 \times 12 \text{ minutes} \\ &= 720 \text{ minutes} \\ \therefore 12 \text{ hours } 13 \text{ minutes} \\ &= 12 \text{ hours} + 13 \text{ minutes} \\ &= 720 \text{ minutes} + 13 \text{ minutes} \\ &= \underline{733 \text{ minutes Ans}} \end{aligned}$$

8. B. (1) Convert 4 days into hours

Solution

$$\begin{aligned} \because 1 \text{ day} &= 24 \text{ hours} \\ \therefore 4 \text{ days} &= 24 \times 4 = 96 \text{ hours Ans} \end{aligned}$$

8. B. (4) Convert 5 days 20 hours into hours. Solution

$$\begin{aligned} \because 1 \text{ day} &= 24 \text{ hours} \\ \therefore 5 \text{ days} &= 24 \times 5 = 120 \text{ hours} \\ \therefore 5 \text{ days } 20 \text{ hours} \\ &= 5 \text{ days} + 20 \text{ hours} \\ &= 120 \text{ hours} + 20 \text{ hours} \\ &= \underline{140 \text{ hours Ans}} \end{aligned}$$

Q.B. ⑤ Convert 5 weeks 10 hours into hours. Solution:

- ∴ 1 week = 7 days
- ∴ 5 weeks = $7 \times 5 = 35$ days
- ∴ 1 day = 24 hours
- ∴ 35 days = 35×24 hours
- ∴ 5 weeks = 840 hours
- ∴ 5 weeks 10 hours = $840 \text{ hrs} + 10 \text{ hrs} = 850 \text{ hrs}$ Ans

Q.C. ③ Convert 720 minutes into hours. Solution:

- ∴ 60 min = 1 hr
 - ∴ 720 min = $720 \div 60 = 12$ hours
- Ans

$$\begin{array}{r} \text{Q} \rightarrow 12 \text{ hrs} \\ 60 \overline{)720} \\ \underline{-60} \\ 120 \\ \underline{-120} \\ 0 \end{array}$$

Q.C. ⑥ Convert 1650 min into hrs and min. Solution:

- ∴ 60 minutes = 1 hour
 - ∴ 1650 minutes = $1650 \div 60 = 27$ hours 30 minutes
- Ans

$$\begin{array}{r} \text{Q} \rightarrow 27 \text{ hrs} \\ 60 \overline{)1650} \\ \underline{-120} \\ 450 \\ \underline{-420} \\ 30 \end{array}$$

R \rightarrow 30 min

Q.D. ① Convert 4 minutes 50 seconds into seconds. Solution:

- ∴ 1 min = 60 sec
 - ∴ 4 min = 60×4 sec = 240 sec
 - ∴ 4 min 50 sec = $240 \text{ sec} + 50 \text{ sec} = 290$ seconds
- Ans

Q.E. ① Convert 600 seconds into minutes. Solution:

- ∴ 60 seconds = 1 minute
 - ∴ 600 sec = $600 \div 60 = 10$ minutes
- Ans

Q.E. ③ Convert 500 sec into min and sec. Solution:

- ∴ 60 sec = 1 min
 - ∴ 500 sec = $500 \div 60 = 8$ min 20 sec
- Ans

$$\begin{array}{r} 8 \text{ min} \leftarrow \text{Q} \\ 60 \overline{)500} \\ \underline{-480} \\ 20 \end{array}$$

R \rightarrow 20 sec