

Exercise 15 (C)

(1) Convert into hours :-

$$\begin{aligned} \text{(a) } 8 \text{ days} &= 1 \text{ day} = 24 \text{ hours} \\ &8 \text{ days} = 8 \times 24 \\ &= 192 \text{ hours} \end{aligned}$$

$$\begin{aligned} \text{(b) } 5 \text{ days } 10 \text{ hours} &= 1 \text{ day} = 24 \text{ hours} \\ 5 \text{ days } 10 \text{ hours} &= 5 \times 24 + 10 \\ &= 120 + 10 \\ &= 130 \text{ hours} \end{aligned}$$

$$\begin{aligned} \text{(c) } 10 \text{ days } 20 \text{ hours} &= 1 \text{ day} = 24 \text{ hours} \\ 10 \text{ days } 20 \text{ hours} &= 10 \times 24 + 20 \\ &= 240 + 20 \\ &= 260 \text{ hours} \end{aligned}$$

$$\begin{aligned} \text{(d) } 6 \text{ days } 2 \text{ hours} &= 1 \text{ day} = 24 \text{ hours} \\ 6 \text{ days } 2 \text{ hours} &= 6 \times 24 + 2 \\ &= 144 + 2 \\ &= 146 \text{ hours} \end{aligned}$$

(2) Convert into minutes

(a) 3 hours = 1 hour = 60 minutes

$$\begin{aligned} 3 \text{ hours} &= 3 \times 60 \\ &= 180 \text{ minutes} \end{aligned}$$

(b) 2 hours - 6 minutes = 1 hour = 60 minutes

$$2 \text{ hours } 6 \text{ minutes} = 2 \times 60 + 6$$

$$= 120 + 6$$

$$= 126 \text{ minutes}$$

(c) 8 hours 40 minutes = 1 hour = 60 minutes

$$8 \text{ hours } 40 \text{ minutes} = 8 \times 60 + 40$$

$$= 480 + 40$$

$$= 520 \text{ minutes}$$

(d) 15 hours 30 minutes = 1 hour = 60 minutes

$$15 \text{ hours } 30 \text{ minutes} = 15 \times 60 + 30$$

$$= 900 + 30$$

$$= 930 \text{ minutes}$$

(3) Convert into seconds

(a) 6 minutes = 1 minutes = 60 seconds

$$6 \text{ minutes} = 60 \times 6$$

$$= 360 \text{ seconds}$$

(b) 2 minutes 4 seconds = 1 minutes = 60 seconds

$$2 \text{ minutes } 4 \text{ seconds} = 2 \times 60 + 4$$

$$= 120 + 4$$

$$= 124 \text{ ~~120~~ seconds}$$

HW(c) 40 minutes 30 seconds = 1 minutes = 60 seconds

$$40 \text{ minutes } 30 \text{ seconds} = 40 \times 60 + 30$$

$$= 2400 + 30$$

$$= 2430 \text{ seconds}$$

(d) 1 hour 2 minutes 30 seconds =

$$1 \text{ hour} = 60 \text{ minutes} + 2 \text{ minutes}$$

$$= 62 \text{ minutes}$$

$$= 1 \text{ minute} = 60 \text{ seconds}$$

$$= 62 \text{ minutes } - 30 \text{ seconds} = 62 \times 60 + 30$$

$$= 3720 + 30$$

$$= 3750 \text{ seconds}$$

(4) Convert into minutes and seconds

(a) $450 \text{ seconds} = 60 \text{ seconds} = 1 \text{ minutes}$

~~60~~ $450 \text{ seconds} = 450 \div 60$
 $= Q = 7 \quad R = 30$

~~60~~ Here the quotient 7 denotes by the minutes and remainder 30 represent the seconds. = 7 minutes 30 seconds

(b) $540 \text{ seconds} = 60 \text{ seconds} = 1 \text{ minute}$

$540 \text{ seconds} = 540 \div 60 = 9$

Here the quotient 9 denotes by the minutes. = 9 minutes

(c) $900 \text{ seconds} = 60 \text{ seconds} = 1 \text{ minute}$

$900 \text{ seconds} = 900 \div 60 = 15 \text{ seconds}$

(d) $1006 \text{ seconds} = 60 \text{ seconds} = 1 \text{ minute}$

$1006 \text{ seconds} = 1006 \div 60 = Q = 16 \quad R = 46$

Here the quotient 16 denotes by the minutes and remainder ~~30~~ 46 represent the seconds. = 16 minutes 46 seconds.