

## Exercise-15(c)

1 Convert into hours:-

a) 8 days

$$1 \text{ day} = 24 \text{ hours}$$

$$8 \text{ days} = 8 \times 24 = 192 \text{ hours}$$

$$\begin{array}{r} 24 \\ \times 8 \\ \hline 192 \end{array}$$

b) 5 days 10 hours

$$1 \text{ days} = 24 \text{ hours}$$

$$5 \text{ days} = 24 \times 5 = 120 \text{ hours}$$

$$\begin{array}{r} 24 \\ \times 5 \\ \hline 120 \end{array}$$

$$5 \text{ days } 10 \text{ hours} = 120 + 10 = 130 \text{ hours}$$

c) 10 days 20 hours

1 day = 24 hours

$$10 \text{ days} = 24 \times 10 = 240$$

$$\begin{array}{r} 24 \\ \times 10 \\ \hline 00 \\ + 24 \\ \hline 240 \end{array}$$

$$10 \text{ days } 20 \text{ hours} = 240 + 20 = 260 \text{ hours}$$

d) 6 days 2 hours

1 day = 24 hours

$$6 \text{ days} = 24 \times 6 = 144$$

$$\begin{array}{r} 24 \\ \times 6 \\ \hline 144 \end{array}$$

$$6 \text{ days } 2 \text{ hours} = 144 + 2 = 146 \text{ hours}$$

2 Convert into minutes

a) 3 hours

1 hour = 60 minutes

3 hours =  $60 \times 3 = 180$  minutes

$$\begin{array}{r} 60 \\ \times 3 \\ \hline 180 \end{array}$$

b) 2 hours 6 minutes

1 hour = 60 minutes

2 hours =  $60 \times 2 = 120$  minutes

$$\begin{array}{r} 60 \\ \times 2 \\ \hline 120 \end{array}$$

2 hours 6 minutes =  $120 + 6 = 126$  minutes

c) 8 hours 40 minutes

1 hour = 60 minutes

8 hours =  $60 \times 8 = 480$  minutes

$$\begin{array}{r} 60 \times 8 \\ \times 8 \\ \hline 480 \end{array}$$

8 hours 40 minutes =  $480 + 40 = 520$

d) 15 hours 30 minutes

1 hour = ~~60~~ 60 minutes

15 hours =  $60 \times 15 = 900$  minutes

$$\begin{array}{r} 60 \\ \times 15 \\ \hline 300 \\ + 60 \\ \hline 900 \end{array}$$

15 hours 30 minutes =  $900 + 30 = 930$  minutes

### 3 Convert into seconds

a) 6 minutes

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

$$6 \text{ minute} = 60 \times 6 = 360 \text{ seconds}$$

$$\begin{array}{r} 60 \\ \times 6 \\ \hline 360 \end{array}$$

b) 2 minutes 4 seconds

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

$$2 \text{ minutes} = 60 \times 2 = 120$$

$$\begin{array}{r} 60 \\ \times 2 \\ \hline 120 \end{array}$$

$$2 \text{ minutes } 4 \text{ seconds} = 120 + 4 = 124 \text{ seconds}$$

c) 40 minutes 30 seconds

1 minute = 60 seconds

$$40 \text{ minutes} = 60 \times 40 = 240$$

$$\begin{array}{r} 60 \\ \times 40 \\ \hline 240 \end{array}$$

$$40 \text{ minutes } 30 \text{ seconds} = 240 + 30 = 270 \text{ seconds}$$

d) 1 hour 2 minutes 30 seconds

1 hour = 60 minutes

$$1 \text{ hour } 2 \text{ minutes} = 60 + 2 = 62 \text{ minutes}$$

1 minute = 60 seconds

$$62 \text{ minutes} = 60 \times 62 =$$

$$\begin{array}{r} 60 \\ \times 62 \\ \hline 120 \\ + 360 \\ \hline 3720 \text{ seconds} \end{array}$$

~~60~~  
~~62~~

$$1 \text{ hour } 2 \text{ minutes } 30 \text{ seconds} = 3720 +$$

$$30 = 3750 \text{ seconds}$$

4 Convert into minutes and seconds

a) 450 seconds

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

$$450 \text{ seconds} = 450 \div 60$$

$$\begin{array}{r} 7 \\ 60 \overline{) 450} \\ \underline{- 420} \\ 30 \end{array}$$

b) 540 seconds

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

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

$$\begin{array}{r} 9 \\ 60 \overline{) 540} \\ \underline{- 540} \\ 0 \end{array}$$

c) 900 seconds

60 seconds = 1 minute

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

$$\begin{array}{r} 15 \\ 60 \overline{) 900} \\ - 900 \\ \hline 0 \end{array}$$

d) 1006 seconds

60 seconds = 1 minute

$$1006 \text{ seconds} = 1006 \div 60$$

$$\begin{array}{r} 16 \\ 60 \overline{) 1006} \\ - 960 \\ \hline 046 \end{array}$$