

**Class :4**

**Subject : Mathematics**

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**Revision sheet solution part 2**

**Chapter: Eleven**

**Time**

1. Express in seconds.

(a) Solution: We know, 1 hour = 60 minutes.

Again , we know, 1 minute = 60 seconds.

$$\begin{aligned}\text{Now, } 60 \text{ minutes} &= (60 \times 60) \text{ seconds.} \\ &= 3600 \text{ seconds.}\end{aligned}$$

Ans: 3600 seconds.

(b) Solution: We know, 1 minutes = 60 seconds.

$$\begin{aligned}\text{Now, } 4 \text{ minutes} &= (60 \times 4) \text{ seconds.} \\ &= 240 \text{ seconds.}\end{aligned}$$

Ans: 240 seconds.

(c) Solution: We know, 1 minutes = 60 seconds.

$$\begin{aligned}\text{Now, } 12 \text{ minutes} &= (60 \times 12) \text{ seconds.} \\ &= 720 \text{ seconds.}\end{aligned}$$

Ans: 720 seconds.

(d) Solution: We know, 1 minutes = 60 seconds.

$$\begin{aligned}\text{Now, } 20 \text{ minutes} &= (60 \times 20) \text{ seconds.} \\ &= 1200 \text{ seconds.}\end{aligned}$$

Ans: 1200 seconds.

2. Express in minutes.

(a) Solution: We know, 1 day = 24 hours

Again, we know, 1 hour = 60 minutes.

$$\begin{aligned}\text{Now, } 24 \text{ hours} &= (60 \times 24) \text{ minutes} \\ &= 1440 \text{ minutes.}\end{aligned}$$

Ans: 1440 minutes.

(b) Solution: We know, 1 week = 7 days.

Again, we know, 1 day = 24 hours.

$$\begin{aligned}7 \text{ days} &= (24 \times 7) \text{ hours.} \\ &= 168 \text{ hours.}\end{aligned}$$

Again, we know, 1 hour = 60 minutes

$$\begin{aligned}\text{Now, } 168 \text{ hours} &= (60 \times 168) \text{ minutes.} \\ &= 10080 \text{ minutes.}\end{aligned}$$

Ans: 10080 minutes.



Ans: 1 day .

(d) Solution: we know, 24 hours = 1 day

$$1 \text{ hour} = \frac{1}{24} \text{ day} \quad \left| \text{R.w: } (1 \div 24) \right.$$

$$\begin{array}{l} \text{Now, } 120 \text{ hours} = \frac{1 \times 120}{24} \text{ days} \\ = 5 \text{ days} \end{array} \quad \left| \begin{array}{l} \text{R.W: } \frac{120}{24} = \begin{array}{r} 5 \\ \hline 24 \overline{)120} \\ \underline{120} \\ 0 \end{array} \\ 24 \times 1 = 24, 24 \times 2 = 48, 24 \times 3 = 72, \\ 24 \times 4 = 96, 24 \times 5 = 120 \end{array} \right.$$

Ans: 5 days .

5. Add together and change them to hours and minutes.

(a) Solution: 50 minutes + 30 minutes = 80 minutes

We know, 1 hour = 60 minutes.

So, 80 minutes = 60 minutes + 20 minutes

$$= 1 \text{ hour} + 20 \text{ minutes}$$

Ans: 80 minutes and 1 hour + 20 minutes.

(b) Solution: 60 minutes + 70 minutes = 130 minutes

We know, 1 hour = 60 minutes.

So, 130 minutes = 60 minutes + 60 minutes + 10 minutes

$$= 1 \text{ hour} + 1 \text{ hour} + 10 \text{ minutes}$$

$$= 2 \text{ hours} + 10 \text{ minutes}$$

Ans: 130 minutes and 2 hours + 10 minutes.

(a) Solution: 100 minutes + 20 minutes = 120 minutes

We know, 1 hour = 60 minutes.

So, 120 minutes = 60 minutes + 60 minutes

= 1 hour + 1 hour

= 2 hours

Ans: 120 minutes and 2 hours.

Word problem:

1. Solution: Year

-1	+12
11 = 12	0 = 12
-10	9
1	3

Month

[month]  
0-9, it is impossible so move at first  
1 year = 12 months and 12 months is  
adding with 0 months (12+0)=12 and  
subtract 9 from 12. (12-9)=3

[year] Here, 12 years but 1 year = 12 months,  
So, subtract 1 from 12. (12-1) = 11. Now,  
11-10=1

Ans: The difference is 1 year and 3 months.

2. Solution: Masuda Begum gets leave = 3 months 3 weeks 12 days

$$\begin{aligned} &= 3 \text{ months} + (3 \times 7 + 12) \text{ days} \quad [1 \text{ week} = 7 \text{ days}] \\ &= 3 \text{ months } 33 \text{ days} \quad [1 \text{ month} = 30 \text{ days}] \\ &= 4 \text{ months } 3 \text{ days} \end{aligned}$$

Masuda Begum took leave = 2 months 4 weeks 3 days

$$\begin{aligned} &= 2 \text{ months} + (4 \times 7 + 3) \text{ days} \quad [1 \text{ week} = 7 \text{ days}] \\ &= 2 \text{ months } 31 \text{ days} \quad [1 \text{ month} = 30 \text{ days}] \\ &= 3 \text{ months } 1 \text{ day} \end{aligned}$$

Months	Days
4	3
- 3	1
1	2

Now, 1 month 2 days = (30+2)=32 days [ 1 month=30 days]

Ans: 32 days leave she can take more.

3. Solution:

(1)

<u>Solution:</u>	Hour	Minute	Second
	2	15 <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">-1</span>	25 <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">+60</span>
	- 2	2	57
		12	28

[second] 25-57 is impossible, so move 1 minute=60 seconds (60+25)=85 and subtract 57 from 85. (85-57)=28

[minute] 1 minute=60seconds  
So, 15-1=14 and subtract 2  
From 14, (14-2)=12

Ans: The difference 12 minutes 28 seconds .

[hour] 2-2=0

(2)

<u>Solution:</u>	hour	minute	second
	2	2 <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">+1</span>	57
	+ 2	15	25
	4	18	22

[second] 57+25=82 =60+22, so 60 carries 1 minute. so putting 22 Seconds and caring 1 minute.

[minute] In caring 1 minute is added with 2(2+1)=3. Now, (3+15)=18.

[ hour] 2+2 =4

Ans: 4hours 18 minutes 22 seconds

4. Solution: Year

<div style="border: 1px solid black; padding: 5px; display: inline-block;"><math>\textcircled{-1}</math></div> $16 = 17$ -15 <hr style="width: 100%; border: 0.5px solid black;"/> $1$	<div style="border: 1px solid black; padding: 5px; display: inline-block;"><math>\textcircled{+12}</math></div> $3 = 15$ 10 <hr style="width: 100%; border: 0.5px solid black;"/> $5$
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Month

[month]

3-10, it is impossible so move at first

1 year=12 months and 12 months is

adding with 3 months  $(12+3)=15$  and

subtract 10 from 15.  $(15-10)=5$

[year] Here, 17 years but 1 year=12 months,

So, subtract 1 from 17.  $(17-1)=16$ . Now,

$$16-15=1$$

Ans: The difference is 1 year and 5 months.