Cosmo School

Class-5

Subject-Mathematics

Chapter-12 (Time)

Date: 19/10/2020

Revision Sheet (Solution)

Creative question:

1. Rashed was born on 27 February, 2012. Rabeya was born 8 days later of his birth.
    a. What was Rabeya's date of birth?
    b. How many hours were in February, 2012?

Solution:

a)

$$
\begin{array}{r}
503 \\
4\overline{)2012} \\
20 \\
\hline
12 \\
12 \\
\hline
0
\end{array}
$$

Since there is no remainder, so 2012 is a leap year.
So February has 29 days.

∴ Remaining day of February = 29 – 27 = 2 days

February will end 2 days after Rashed's birthday, and then March will start.

∴ Rabeya's birthday will be = 8 – 2 = 6 March, 2012.

Ans: 6 March, 2012.

b) From 'a' we get, February, 2012 has 29 days.

Now,

29 days

= (29 × 24) hours [∵ 1 day = 24 hours]

= 696 hours

Ans: 696 hours.

2. A train left one city at 11:50 and arrived at the destination at 15:25.

a. In 12 hour clock when the train arrived at the destination?
b. How many hours and minutes did the train take?

Solution:

a) The train arrived at the destination in 24 hour clock at 15:25

In 12 hour clock the train arrived at the destination at

= (15:25 – 12:00) p.m.

= 3:25 p.m.

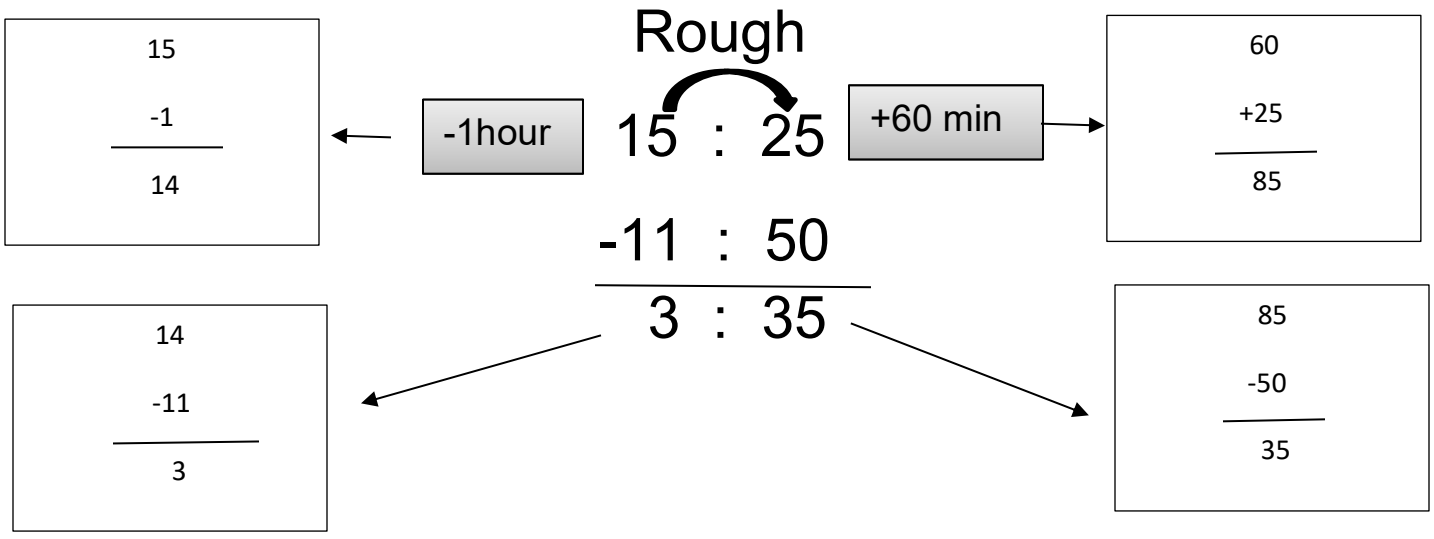
Ans: 3:25 p.m.

b) The train reached at the destination at = 15:25 hour

The train left from the city at = 11:50 hour

∴ The train travelled for = 3:35 hour

Ans: 3:35 hours.



3. A launch left Dhaka at 11:45 and reached at 15:20.

a. Express the reaching time in 12 o clock.

b. How much the launch takes to reach destination?

Solution:

a) The launch reached at 15:20 in 24 hour clock.

In 12 hour clock the launch reached at = (15:20 – 12:00) p.m.

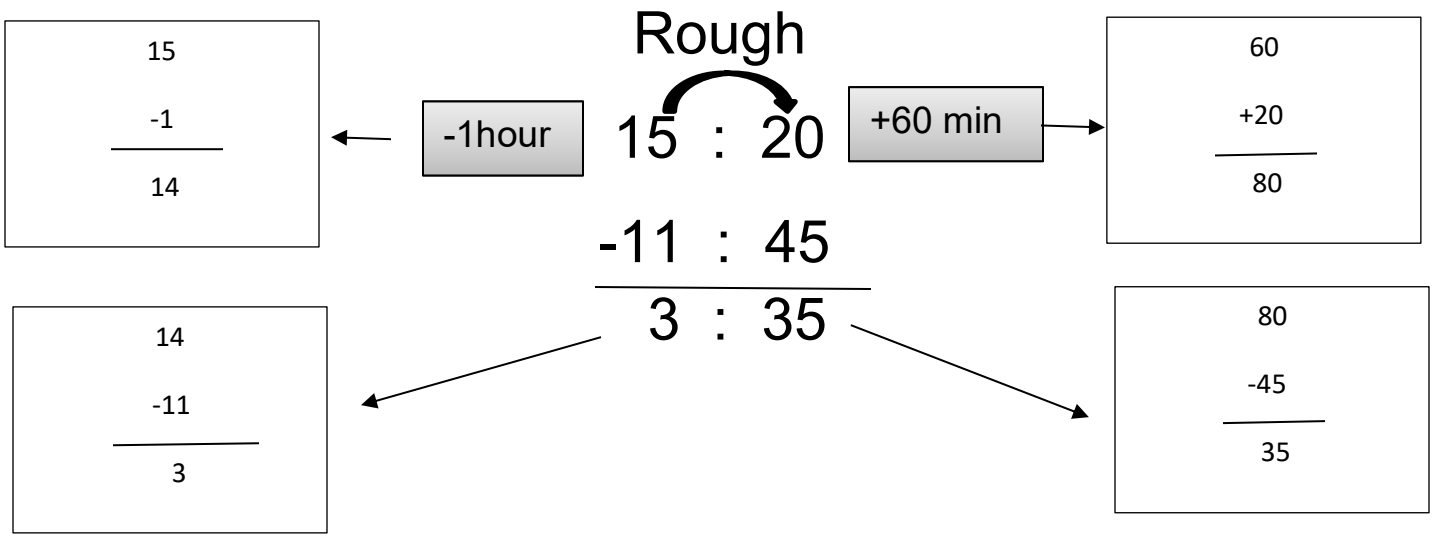
= 3:20 p.m.

Ans: 3:20 p.m.

b) The launch travelled for = (15:20 – 11:45) hours

= 3:35 hours

Ans: 3:35 hours.



4. Raiyan left home at 7:00 a.m. returned 4:00 p.m.

a. Express his leaving time from home and return in 24 hour clock.

b. How many hours he was outside from home?

Solution:

a) Raiyan left home at 7:00 a.m. in 12 hour clock.

∴ In 24 hour clock he left home at = 07:00

Again,

Raiyan returned at home at 4:00 p.m. in 12 hour clock.

∴ In 24 hour clock he returned home at = (12:00 + 4:00) = 16:00

Ans: 07:00 and 16:00.

b)

Hour	Minute
12	00
- 7	00
5	00

Now,

Hour	Minute
5	00
+ 4	00
9	00

∴ Raiyan was outside home for 9 hours.

Ans: 9 hours.

5. Rakib was born on 25th February, 2010. His cousin Tanha was born after 7 days.

a. How many hours are there in February 2010?

b. Write the birth date of Tanha.

Solution:

a)

$$4\overline{)2010}\ 502$$

20

10

8

2

Since there is a remainder, which is 2. So 2010 is not a leap year.

So February, 2010 has 28 days.

Now,

28 days

= (28 × 24) hours [∵ 1 day = 24 hours]

= 672 hours

Ans: 672 hours.

b) From 'a' we get, February, 2010 has 28 days.

∴ Remaining day of February = 28 – 25 = 3 days

February will end 3 days after Rakib's birthday, and then March will start.

∴ Tanha's birthday will be = 7 – 3 = 4 March, 2010.

Ans: 4 March, 2010.

6. Kamal spent February 2012 in Dhaka.
   a. How many hours did he spend in Dhaka?
   b. How many seconds did he spend in Dhaka?

Solution:

a)

$$
\begin{array}{r}
503 \\
4\overline{)2012} \\
20 \\
\hline
12 \\
12 \\
\hline
0
\end{array}
$$

Since there is no remainder, so 2012 is a leap year.
So February has 29 days.

Now,

29 days

= (29 × 24) hours [∵ 1 day = 24 hours]

= 696 hours

∴ Kamal spent 696 hours in Dhaka.

Ans: 696 hours.

b) From 'a' we get,

29 days = 696 hours

= (696 × 60) minutes [∵ 1 hour = 60 minutes]

= 41760 minutes

= (41760 × 60) seconds [∵ 1 minutes = 60 seconds]

= 2505600 seconds

∴ Kamal spent 2505600 seconds in Dhaka.

Ans: 2505600 seconds.

7. Mita starts her study at 7:30 p.m. and goes to bed at 10:30 p.m. every day.

a. When does Mita start her study and go to bed in the 24 hour clock?
b. How many hours does she study?

Solution:

a) Mita starts her study at 7:30 p.m.
In 24 hour clock Mita starts her study at = 12:00 + 7:30 = 19:30
Again, Mita goes to bed at 10:30 p.m.
In 24 hour clock Mita goes to bed at = 12:00 + 10:30 = 22:30
Ans: 19:30 and 22:30.

b) Mita starts her study at 7:30 p.m.
Mita goes to bed at 10:30 p.m.
∴ She continues study for = (10:30 – 7:30) hours

= 3:00 hours

Ans: 3 hours.

8. Salma goes to bed at 10:30 p.m. and gets up at 6 a.m. in the morning.
   a. Express the time when Salma goes to bed in 24 hour clock.
   b. How long does she sleep?

Solution:

a) Salma goes to bed at 10:30 p.m.

In 24 hour clock she goes to bed at = 12:00 + 10:30 = 22:30

Ans: 22:30.

b)

	Hour	Minute	
-1 hour	12	00	+60 min
-	10	30	
	1	30	

60
-30
30

Now,

Hour	Minute
6	00
+ 1	30
7	30

∴ Salma sleep for 7 hours 30 minutes.

Ans: 7 hours 30 minutes.

Short question:

1. What is the period of 100 consecutive years called?

Ans: Century.

2. What is the period of 10 consecutive years called?

Ans: Decade.

3. What is the period of 12 consecutive years called?

Ans: Era.

4. Express 15:55 in the 12 hour clock.

Ans: 3:55 p.m.

5. 1 month = how many hours?

Ans: 720 hours.

1 month

= (1 × 30) Days [∵ 1 month = 30 days]

= 30 days

= (30 × 24) hours [∵ 1 day = 24 hours]

= 720 hours

6. How many seconds are there in half an hour?

Ans: 180 seconds.

Half an hour = 30 minutes

= (30 × 60) seconds [∵ 1 minutes = 60 seconds]

= 1800 seconds

7. How many days were there in February 1618?

Ans: 28 days.

$$
\begin{array}{r}
404 \\
4\overline{)1618} \\
16 \\
\hline
18 \\
16 \\
\hline
2
\end{array}
$$

Remainder 2. So 1618 was not a leap year.

∴ February, 1618 = 28 days

8. How many days in total are there in July and August?

Ans: 61 days.

9. How many digit numbers are used for hours and minutes for 24 hours notation?

Ans: 4 digits.

10. Your school breaks at 3 in the afternoon. At what time in international system does your school break?

Ans: 15:00.

11. How many days in the month of Srabon?

Ans: 31

12. Was 2012 a leap year?

Ans: 2012 was a leap year.

13. How many days does February have in leap year?

Ans: 29 days.

14. After how many years does the leap year occur?

Ans: 4 years.

15. How many days are there in a leap year?

Ans: 366 days.

16. In which century is contain the year 1852?

Ans: 19^{th} century.

17. Which century is from 1901 to 2000?

Ans: 20^{th} century.

18. 1 day = how many seconds?

Ans: 86400 seconds.

19. You woke up at 6:20 in the morning. In what time of international system did you woke up?

Ans: 06:20

20. A bus starts for Kolkata at 20:40 in international system. At what time of night did the bus start?

Ans: 8:40 p.m.

Solution sheet prepared by –

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