Raghav practices yoga in the morning.

Let us find out

1. At what time did Raghav start practising Yoga? ....

2. At what time did he finish? ....

3. How much time did he spend practising Yoga? ....

4. Find the time elapsed between the given time periods. Share your strategies.

    (a) 01:15 p.m. to 01:42 p.m.?

    (b) 03:18 p.m. to 08:18 p.m.?

    (c) 09:15 a.m. to 11:30 a.m.?

5. The table below shows the time taken by 3 children to paint a picture.

Name	Time Taken
Raghav	1 hour 20 minutes
Rani	2 hours 10 minutes
Ritu	1 hour 35 minutes

    (a) Who took the longest time?
    (b) Who took the least time?

6. Fill in the blanks by writing the time in the appropriate format.

Time in 12-hour fromat	Time in 24-hour fromat
	24:00
05:30 a.m.	05:30 hours
…………	08:35 hours
11:55 a.m.	……… hours
02:30 p.m.	14:30 hours
05:30 p.m.	……… hours
09:35 p.m.	……… hours

7. Match the following.

Time in 12–hour format	Time in 24–hour format
06:30 a.m.	01:30 hours
08:45 p.m.	23:45 hours
11:45 p.m.	06:30 hours
04:30 a.m.	20:45 hours
07:30 p.m.	04:30 hours
01:30 a.m.	19:30 hours

School Race

Akira, Sunita, and Mary are participating in a 200 m-walking race.

Do you notice the use of a new unit 'seconds' in the picture?

1 min = 60 seconds

In situations like a race, **'seconds'** help us observe small differences in time taken by participants. Each participant took 1 minute but how much more?

Identify the child who won the race. How much time did the child take?

Let Us Do

Estimate whether you would take seconds or minutes to complete the following activities. Tick the appropriate cell.

Activity	Seconds	Minutes
Blinking of eyes		
Switching on and switching off the lights		
Counting from 1–20		
Filling a glass from the tap		
Melting of an ice-cube		
Making a phone call		
Sitting down on the floor		
Drinking a glass of water		
Snapping fingers		
Washing hands		

Note for the Teachers: Let the learners observe and discuss who stood first, who stood second, and who stood third and why. Help them understand the difference between minutes and seconds and seconds as a unit which adds precision in measuring short time duration. Get the learners to observe that 60 movements of the seconds hand leads to a shift in the minute hand.

List events other than the ones listed above that you can do or that can happen in less than a minute or in a few seconds.

....
....
....
....
....
....
....
....
....
....
....
....

Estimate and verify how many of these you can do in a minute.

Activity	Estimated Number	Actual Number
Number of balloons blown		
Number of push-ups		
Number of breaths		
Number of hops on one leg		

Let Us Find

1. Find out the number of times you can skip the rope in 10 seconds.

2. How long does it take you to write the word **FRIEND**?
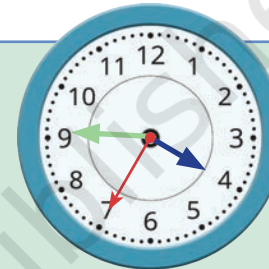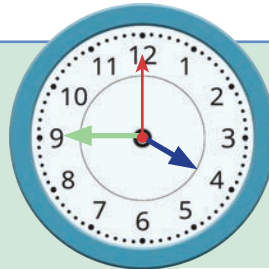
3. How long does it take you to run 100m?

Observe the clocks and fill in the blanks.

1
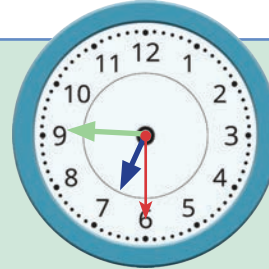
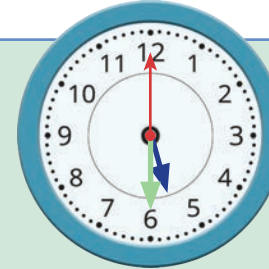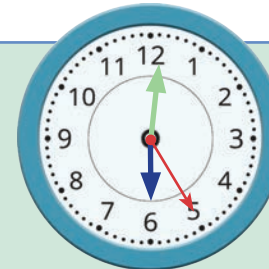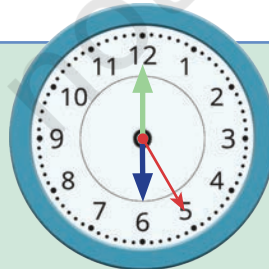Rani took _____ sec. to get out of her bed.

2

Raghav took _____ sec. to move from his room to the kitchen.

3

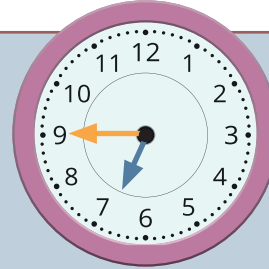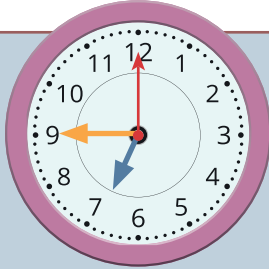Ritu took _____ sec. to pick up a piece of paper from the floor.

4

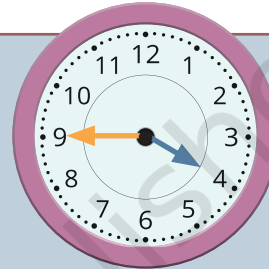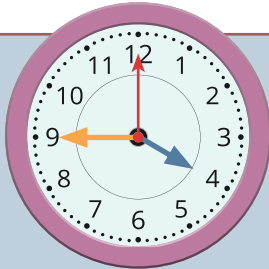Raghu took _____ sec. to wash his spoon and plate.

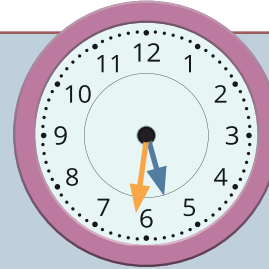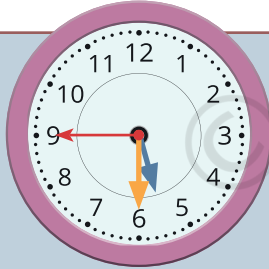Draw the missing seconds hand on the clocks on the right side.

1

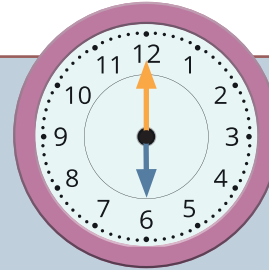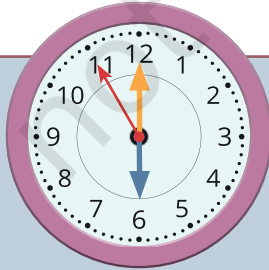Raghu took **20 sec.** to read a sentence in his book.

2

Rani took **30 sec.** to color a rectangle.

3

Raghav took **60 sec.** to move from his home to the garden.

4

Ritu took **40 sec.** to wash a plate.

Conversion of Hours to Minutes

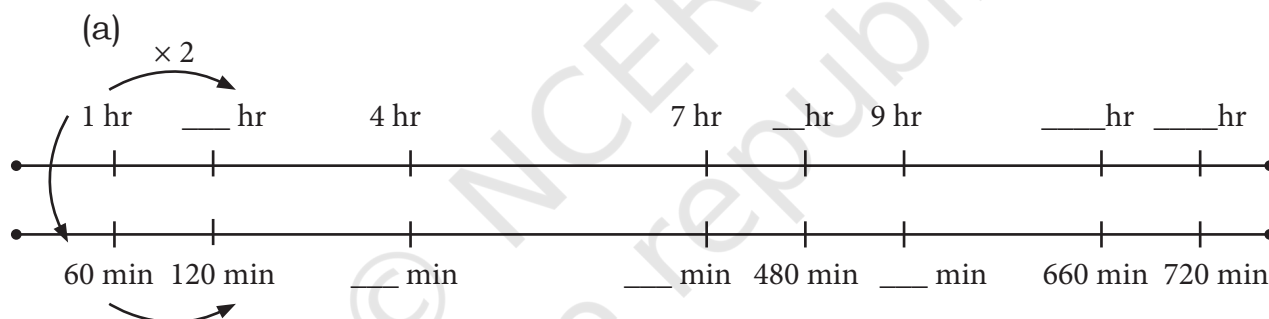Zainab and Remo were converting time from hours to minutes and vice-versa.

We know 1 hr = 60 min. So, 2 hr will have 2 × 60 = 120 min.

This means that 180 min = 3 hr.

As 3 hrs = 3 times 60 = 180 min.

Let Us Do

1. Use the double number line below to complete the conversions.

(a)

```
        × 2
   1 hr  ___ hr   4 hr            7 hr  ___hr  9 hr        ____hr  ____hr
   ├────┼────┼────┼────┼────┼────┼────┼────┼────┼────┼────┤

   ├────┼────┼────┼────┼────┼────┼────┼────┼────┼────┼────┤
 60 min 120 min   ___ min       ___ min 480 min ___ min  660 min 720 min
```

(b) Do as instructed. You can use the above double number line for the following conversions.

   (i)   1 hours 10 minutes = _____ minutes

   (ii)   2 hours 45 minutes = _____ minutes

   (iii) 3 hours 15 minutes = _____ minutes

   (iv)   4 hours 20 minutes = _____ minutes

   (v)   75 minutes   = ____ hour ____ minutes

   (vi)   150 minutes   = ____ hours ____ minutes

   (vii) 220 minutes   = ____ hours ____ minutes

   (viii) 390 minutes   = ____ hours ____ minutes

(c) Fill in the blanks in the double number line to complete the conversions.
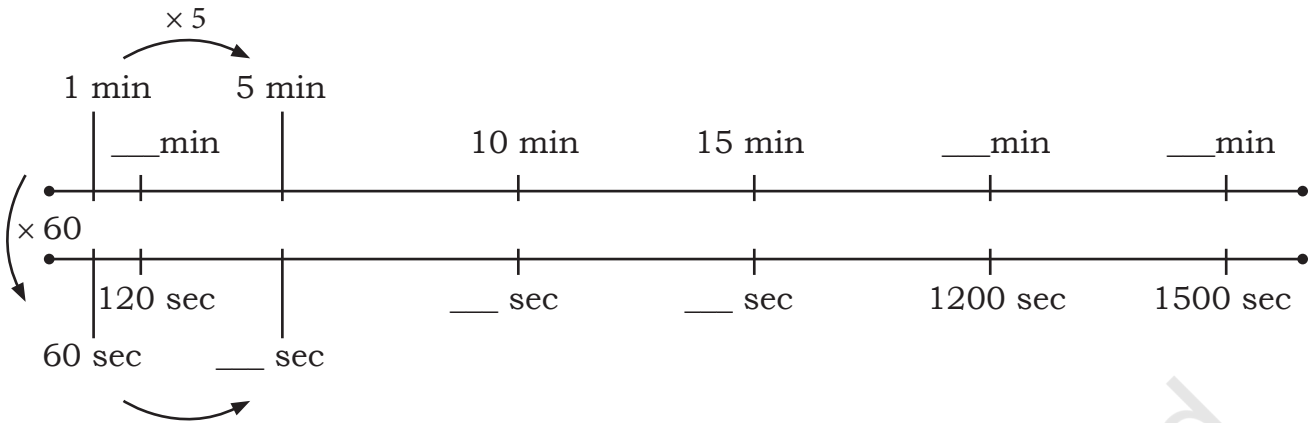
(i)   320 sec   = ____ min ____ sec

(ii) 225 sec   = ____ min ____ sec

(iii) 700 sec   = ____ min ____ sec

(iv) 1,000 sec   = ____ min ____ sec

(v)   10 min 13 sec   = ____ sec

(vi) 4 min 8 sec   = ____ sec

(vii) 15 min 40 sec   = ____ sec

2. Raghav studies Mathematics, English, Hindi, and The World Around Us subjects. He took 50 minutes to study each of the subjects. Find the total time taken in hours and minutes. Share your strategies with your class.

3. Raghu left his house at 08:00 hours and arrived at his *Nana ji's* house at 09:05 hours. How long did he take to reach his house?

08:00 hours to 09:00 hours is 1 hour.
So, Raghu took 1 hour 5 minutes to reach his *Nana ji's* house.

4. Jyoti went to play at 06:15 PM. She came back after 1 hour 45 minutes. At what time did she reach home?

5. Ragini took 1 hour 10 minutes to do her homework. She finished it at 09:40 PM. What time did she start?

6. A group of children left for a picnic at 08:30 AM. They returned after 4 hours and 10 minutes. At what time did they return?

7. Raji started her homework at 06:00 PM. She finished her homework in 1 hour 30 minutes. At what time did she finish?

8. Alya goes out to play at 05:30 PM and comes back after 1 hour 10 minutes. At what time does she come back?

9. If the lunch break of a school starts at 12:30 PM and ends in 35 minutes, what time will lunch end?

10. It is 08:35 PM right now. What time will it be after 8 hours and 25 minutes?

Note for the Teachers: Encourage learners to solve these problems orally and not by aligning them in columns and using algorithms.