## SATISH CHANDRA MEMORIAL SCHOOL (CHAKDAHA)

## Case study

1.The following table shows the time(in hours)spent by a student of class vii in a day:

| Activity | school | sleeping | playing | Watching <br> t.v. | studying | others |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Number of <br> hours | 8 | 8 | 3 | 2 | 2 |  |

Draw bar graph to represent the above data. Is it correct to watch T.V. for 3 hours and studying just 2 hours daily?

## Higher Order Thinking Skills (HOTS)

1. The mean of 6 observations is 17.5 . If five of them are $14,9,23,25$ and 10 ,find the sixth observation.
2. The mean height of 10 students is 151.8 cm . Two more students of height 157.6 cm and 154.4 cm join the group. What is new mean height?
3. The following observations have been arranged in ascending order. If the median of the data is 13 , find the value of $x$ :
$3,6,7,10, x, x+4,19,20,25,28$.
4. If the mean of the data (given below) is 4.5, then find the median of the data:

5,7,7,8,x,3,1,5,4,2
5. Find the probability of getting 53 Sundays in a leap year .
2. Marks obtained by five studentsof class vii in quarterly and half-yearly examination in Mathematics (out of 25 ) are given below-

| Students | Ashish | Arun | Kavish | Maya | Rita |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Quaterly | 10 | 15 | 12 | 21 | 9 |
| Half-Yearly | 15 | 18 | 16 | 20 | 25 |

Represent the above data by a bar graph and answer the following questions:
(i) Do you see any improvement? Justify your answer.
(ii) Who has not done better?
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