DOON PUBLIC SCHOOL BHUJ

HOME WORK

Average score = $\frac{\text{Total runs}}{\text{No. of matches played}} = \frac{913}{11} = 83$

∴ The average score of the cricketer is 83.

Example 2: Mr Khan has decided to take his family to his village on a weekend by car. During the first hour, he covered 55 km. During the second hour, he covered 52 km. During the third hour, he covered 48 km and during the fourth hour, he covered 57 km. What is his average speed?

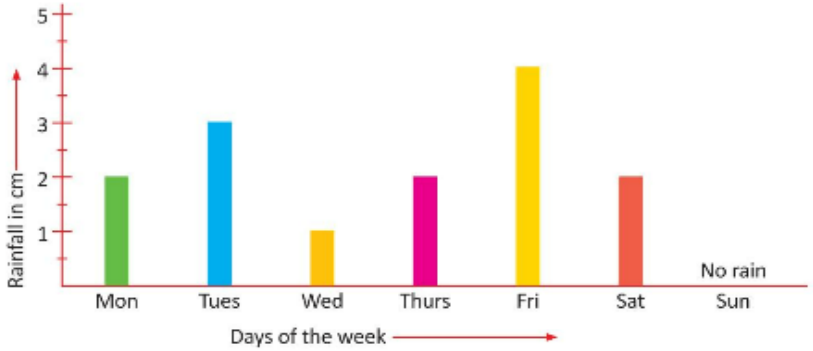
Total distance covered in 4 hours

= 55 km + 52 km + 48 km + 57 km

= 212 km

Average Speed = $\frac{\text{Total distance travelled}}{\text{Total time taken}} = \frac{212}{4}$ = 53 kilometres per hour

Exercise 2.4

1. Find the average of the first 10 even numbers.
2. Find the average of the first five multiples of 4.
3. The marks scored by Ravi in 5 maths tests are given as 81, 78, 93, 85 and 88. His marks in 5 tests of English are given as 68, 72, 90, 88 and 82. Find his average marks in both maths and English. In which subject did he score better?
4. 

The above bar graph shows the amount of rainfall in centimetres during a week.

a. What is the average rainfall?

b. On which day the rainfall was less than the average?

c. Which are the days when the rainfall was more than the average?

d. Was the rainfall equal to the average rainfall on any day?

5. The runs scored by two teams of cricket players in 7 matches are as follows:

Match	1	2	3	4	5	6	7
Team A	247	328	521	128	272	391	247
Team B	198	228	361	408	521	452	12

a. Which team's performance is better?

b. In how many matches has team A scored better than their average?

c. In how many matches has team B scored less than their average?

1. The average marks scored by a class of 25 students in English exam is 82. What is the total marks scored by them?

Hint: Average = $\frac{\text{Total marks}}{\text{Number of students}}$ ∴ Total marks = Average × Number of students

2. The average daily wage paid to 10 male workers of a factory is ₹ 180 and the average daily wage paid to 8 female workers is ₹ 140. What is the average wage of the whole group?

Target Olympiad

A.

3	13	C	D	E	2	G	I

If the sum of any three consecutive numbers is 18, find I.

B.

6						6	

Given above is a grid to fill 8-digit number. Fill in the empty boxes with digits so that the sum of any three consecutive digits is 19 and that 3-digit number is an even number.

Can there be more than one answer?

Story Time

Long ago there lived a poet. He was so poor that he could not even feed his family.

On hearing about the generosity of the king, he decided to meet him and recite a poem. He reached the royal palace and begged for an appointment with the king. The king agreed to meet the poet. The poet sang a song in praise of the king. The king was very happy and told the poet to ask for anything as his reward.

Exercise 2.4 (Page 30)

1. First 10 even numbers: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20

$$\text{Average} = \frac{2+4+6+8+10+12+14+16+18+20}{10} = \frac{110}{10} = 11$$

The average of the first 10 even numbers = 11

2. First five multiples of 4: 4, 8, 12, 16, 20

$$\text{Average} = \frac{4+8+12+16+20}{5} = \frac{60}{5} = 12$$

The average of the first five multiples of 4 = 12

3. Ravi's marks in 5 maths tests = 81, 78, 93, 85, 88

$$\text{Average} = \frac{81+78+93+85+88}{5} = \frac{425}{5} = 85$$

Ravi's marks in 5 English tests = 68, 72, 90, 88, 82

$$\text{Average} = \frac{68+72+90+88+82}{5} = \frac{400}{5} = 80 \text{ marks}$$

Maths average = 85 marks; English average = 80 marks

Therefore, Ravi scored better in **Maths**.

4. a. $\text{Average} = \frac{2+3+1+2+4+2+0}{7}$

$$= \frac{14}{7} = 2 \text{ cm}$$

b. Wednesday and Sunday

c. Tuesday and Friday

d. Monday, Thursday and Saturday

5. a. Average of Team A $= \frac{247+328+521+128+272+391+247}{7}$

$= \frac{2134}{7} = 304.86$ (approx.)

Average of Team B $= \frac{198+228+361+128+408+521+452+12}{7}$

$= \frac{2180}{7} = 311.43$ (approx.)

Since, average of team B is better.
Therefore, performance of team B is better.

b. 3 matches c. 3 matches

HOTS (Page 31)

1. Number of students = 25
Average marks = 82
∴ Total marks = Average × Number of students
= 82 × 25 = 2050
Total marks scored by the students = 2050

2. Number of male workers = 10
Number of female workers = 8
Total number of workers = 18
Average wage for male = ₹180
Average wage for female = ₹140
Total wage for male = Average wage for male × Number of male workers
= 180 × 10 = ₹1800
Similarly,
Total wage for female = 140 × 8 = ₹1120
∴ Total wage = ₹1800 + ₹1120 = ₹2920

Thus, average pay for whole group $= \frac{\text{Total wage}}{\text{Total number of workers}}$

$= \frac{2920}{18} = 162.222$

∴ Average wage ≈ ₹162