Mean (Average)

Exercise 1 (A)
Calculate the **average (mean)** of:

- a 5, 6, 10
- b 4, 5, 6, 9
- c 4, 6, 5, 25
- d 8, 8, 10, 14
- e 8, 9, 9, 24
- f 5, 7, 10, 11, 14
- g 12, 42, 53, 55, 59
- h £3, £7, £20
- i £5·20, £7·60, £12·32, £12·08
- j 60p, 68p, 95p, 125p
- k £0.80, £2, £3·20, £5
- l 5m, 5m, 5m, 5m, 40m
- m 8kg, 10kg, 12kg
- n 3·4m, 6·2m, 4·1m, 3·3m
- o 12, 15, 16, 16, 18
- p 4g, 4g, 5g, 5g, 6g, 7g, 7g, 9g, 9g, 9g, 9g, 9g, 10g
- q £54, £56, £60, £65, £73, £74, £85, £89, £91, £95
- r 0.3m, 0.42m, 0.63m, 0.75m, 0.84m, 1.2m, 1.38m, 2.16m
- s $42, $18, $36, $86, $94, $24, $141, $28, $87, $36, $143, $72, $4, $99, $5
- t 312km, 547km, 436km, 562km, 835km, 642km, 173km

Exercise 1 (B)
Find the **mean** of:

- a 1kg, 0·5kg, 0·25kg, 0·14kg, 0·06kg
- b 7, 9, 6, 12, 0, 5, 4, 5
- c 2·2, 5·7, 12·8, 6·7, 2·1
- d 7, 7, 8, 9, 9, 9, 10, 11, 11, 12, 15, 15, 15, 15, 15, 15, 16
- e 6·4, 5·2, 1·8, 3·4, 9·4, 7·2, 8·1, 5·5, 0·6, 1·1, 1·6, 2·4, 2·7, 7·2, 8·7, 10·5
- f £3·12, £9·50, 64p, £8, £12·06, £11, 98p, 63p, £41, £20·05
- g 6m, 8·5m, 65cm, 2·4m, 31cm, 50cm, 3·6m, 7·3m, 90cm, 20cm
- h 7, 9, 15, 6, 18, 5, 8, 27, 14, 16, 7
- i £2·10, £3·45, 67p, £1·47, 83p, 65p, £5·21, £4·18
Exercise 1 (C)

1 The weights of 5 males are 7.25kg, 19.75kg, 14.65kg, 2.35kg and 72kg.
   a Find their mean weight.
   b Which one is a baby?
   c Which one (apart from the baby) is probably less than 1 year old?

2 The distances travelled by a car on 5 days were: 68km, 156km, 91km, 162km and 99km. Find:
   a the mean distance travelled.
   b the number of litres of petrol used during the 5 days if the fuel consumption of the car was 9km/litre.

3 The mean price of 12 records is £2.75.
   a What is the TOTAL price of the 12 records?
   b If 2 of the records were LP's costing £6 each, calculate the mean price of the remaining 10.
   c If 6 of the remaining 10 were 'singles' costing £1 each and the other 4 were LP's costing the same price each, how much did each of these 4 LP's cost?
4 This graph shows the amount, in centimetres, of rainfall for 8 months of the year.

![Rainfall Graph]

a Find the mean rainfall to the nearest centimetre.
b Which months have above mean rainfall?  
c Which months have below mean rainfall?

5 The graph gives the daily takings of a shop over a period of 5 days.

![Takings Graph]

a What were the mean daily takings?  
b Which days were above the mean?  
c Which days were below the mean?  
d Suggest why Thursday had the lowest takings?
6. This table shows the wages earned by employees of a certain firm:

<table>
<thead>
<tr>
<th>NAME</th>
<th>Wages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr Jones</td>
<td>£130</td>
</tr>
<tr>
<td>Mrs White</td>
<td>£100</td>
</tr>
<tr>
<td>Mr Green</td>
<td>£200</td>
</tr>
<tr>
<td>Mr Little</td>
<td>£80</td>
</tr>
<tr>
<td>Mr Hokes</td>
<td>£150</td>
</tr>
</tbody>
</table>

What is their mean wage?

7. Here is a table which gives the train times from Park Green to Hope Grove:

<table>
<thead>
<tr>
<th>LEAVE Park Green</th>
<th>7.45 am</th>
<th>8.30 am</th>
<th>9.26 am</th>
<th>10.18 am</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARRIVE Hope Grove</td>
<td>8.00 am</td>
<td>8.50 am</td>
<td>9.53 am</td>
<td>10.32 am</td>
</tr>
</tbody>
</table>

a. Find the mean time for the journey.
b. Can you say why the time for the journey varies?

8. The table shows the number of hours that a group of students watched TV one weekend:

<table>
<thead>
<tr>
<th>Number of hours viewing</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of students</td>
<td>4</td>
<td>5</td>
<td>7</td>
<td>9</td>
<td>10</td>
<td>7</td>
</tr>
</tbody>
</table>

a. How many students were there?
b. Calculate the mean number of hours viewed per student.

9. The mean height of 4 pupils was 152cm. When a fifth pupil joins the group the mean height is increased by 2cm. What is the height of the fifth pupil?

10. In a class of 12 boys and 18 girls at a certain examination the boys' mean mark was 54 and the girls' mean mark was 62. Find the mean mark for the whole class.

11. There are 40 pupils in a class. Their mean mark in an examination is 55. If the 25 boys in the class have a mean mark of 58, find the mean mark of the girls.

12. A class of 20 pupils has a mean age of 12 years. Four pupils whose mean age is 12½ years leave and 6 pupils whose mean is 10½ years join the class. Find the new mean age of the pupils in the class.

13. The mean weight of 8 babies in a ward is 3.2kg. 3 babies whose mean weight is 3.9kg leave the ward and 4 babies whose mean weight is 3.1kg join the ward. What is the new mean weight of the babies in the ward?

14. There are 26 pupils in a class. Their mean mark in an examination is 92. If the 14 boys in the class have a mean mark of 88, find the mean mark of the girls.

15. The mean height of 10 kids in a youth club is 114cm. 2 kids whose mean weight is 110cm leave the club and 6 kids whose mean height is 124cm join the club. What is the new mean weight height of the pupils in the club?