Mean from a Frequency Table S1-S3, National 4

1. A die is thrown 40 times. The way the die lands, is recorded in the table below.

Calculate the mean throw.

| Number | Frequency | Number $x$ frequency |
| :---: | :---: | :---: |
| 1 | 6 |  |
| 2 | 7 |  |
| 3 | 5 |  |
| 4 | 4 |  |
| 5 | 6 |  |
| 6 | 12 |  |
| Totals | 40 |  |
|  |  |  |

2. The weights, to the nearest pound, of 20 newborn babies are recorded. The results are shown in the table.

Calculate the mean weight, correct to the nearest pound.

| Weight | Frequency | Weight $x$ frequency |
| :---: | :---: | :---: |
| 4 | 2 |  |
| 5 | 5 |  |
| 6 | 4 |  |
| 7 | 6 |  |
| 8 | 2 |  |
| 9 | 1 |  |
| Totals |  | 20 |
|  |  |  |
|  |  |  |

3. The heights, in inches, of 30 first year pupils are measured.

The table below shows the results.

Calculate the mean height, correct to one decimal place.

| Height | Frequency | Height $x$ frequency |
| :---: | :---: | :---: |
| 58 | 1 |  |
| 59 | 5 |  |
| 60 | 3 |  |
| 61 | 7 |  |
| 62 | 4 |  |
| 63 | 6 |  |
| 64 | 4 |  |
| Totals | 30 |  |
|  |  |  |

4. 25 pupils are asked 10 mental arithmetic questions.

The table shows the frequency of the number of questions the pupils answered correctly.

Calculate the mean number of correct answers.

| Number <br> correct | Frequency | Number correct x <br> frequency |
| :---: | :---: | :--- |
| 4 | 1 |  |
| 5 | 3 |  |
| 6 | 2 |  |
| 7 | 5 |  |
| 8 | 2 |  |
| 9 | 6 |  |
| 10 | 6 |  |
| Totals |  | 25 |
|  |  |  |

5. 18 pupils are given the same passage to type on a computer. The frequency of the number of errors made by these pupils is shown in the table.

Calculate, to the nearest whole number, the mean number of errors.

| Number <br> of errors | Frequency | Number of errors <br> x frequency |
| :---: | :---: | :---: |
| 0 | 2 |  |
| 1 | 2 |  |
| 2 | 5 |  |
| 3 | 7 |  |
| 4 | 1 |  |
| 5 | 1 |  |
| Totals |  | 18 |
|  |  |  |

6. The pupils in a P.E. class are asked to see how many sit-ups they can do. The results are shown in the table.


Calculate the mean number of sit-ups.

| Number <br> of sit-ups | Frequency | Number of sit-ups <br> x frequency |
| :---: | :---: | :---: |
| 15 | 1 |  |
| 16 | 4 |  |
| 17 | 1 |  |
| 18 | 9 |  |
| 19 | 3 |  |
| 20 | 2 |  |
| 21 | 5 |  |
| Totals |  | 25 |

7. A survey of 50 adults is carried out to see how many texts each sends in a one hour period.
The table shows the results.

Calculate, to the nearest whole number, the mean number of texts.

| Number <br> of texts | Frequency | Number of texts <br> x frequency |
| :---: | :---: | :---: |
| 5 | 4 |  |
| 6 | 4 |  |
| 7 | 3 |  |
| 8 | 11 |  |
| 9 | 5 |  |
| 10 | 7 |  |
| 11 | 16 |  |
| Totals |  | 50 |

8. The results of 92 football matches are recorded.

The table shows the frequency of the number of goals scored in these matches.


Calculate the mean number of goals scored per game.

| Number <br> of goals | Frequency | Number of goals <br> x frequency |
| :---: | :---: | :---: |
| 0 | 13 |  |
| 1 | 22 |  |
| 2 | 25 |  |
| 3 | 21 |  |
| 4 | 6 |  |
| 5 | 1 |  |
| 6 | 4 |  |
| Totals |  | 92 |
|  |  |  |
|  |  |  |

9. The incomes of a group of employees are shown in the table.

Calculate the mean income, to the nearest $£ 100$ pounds.

| Income | Frequency | Income x frequency |
| :--- | :---: | :--- |
| $£ 22000$ | 3 |  |
| $£ 24000$ | 7 |  |
| $£ 26000$ | 5 |  |
| $£ 28000$ | 8 |  |
| $£ 30000$ | 6 |  |
| $£ 32000$ | 10 |  |
| $£ 34000$ | 6 |  |
| Totals |  |  |
|  |  |  |
|  |  |  |

10. A group of 30 people are surveyed on the number of theatre visits they have made in the last year.


The results are shown opposite.
Calculate the mean number of visits.

| No. of <br> visits | Frequency | No. of visits <br> x frequency |
| :---: | :---: | :---: |
| 0 | 7 |  |
| 1 | 5 |  |
| 2 | 3 |  |
| 3 | 8 |  |
| 4 | 2 |  |
| 5 | 5 |  |
| Totals |  |  |

11. The waiting times, in minutes, of patients in a dentist surgery are shown in the table.


Calculate the mean waiting time, to the nearest minute.

| Waiting <br> time | Frequency | Waiting time <br> x frequency |
| :---: | :---: | :---: |
| 5 | 4 |  |
| 6 | 11 |  |
| 7 | 17 |  |
| 8 | 12 |  |
| 9 | 9 |  |
| 10 | 7 |  |
| Totals |  |  |

12. A group of passengers leaving an aeroplane are asked to rate the quality of the service on the flight, from 1 to 5,5 being the best.


Calculate the mean rating given by the passengers.

| Rating | Frequency | Rating $x$ frequency |
| :---: | :---: | :---: |
| 1 | 9 |  |
| 2 | 21 |  |
| 3 | 33 |  |
| 4 | 35 |  |
| 5 | 2 |  |
| Totals |  |  |

