

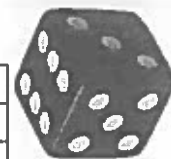
Mean from a Frequency Table S1-S3, National 4

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

Calculate the mean throw.

$$\frac{153}{40} = \underline{3.825}$$

Number	Frequency	Number x frequency
1	6	6
2	7	14
3	5	15
4	4	16
5	6	30
6	12	72
Totals	40	153



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.

$$\frac{124}{20} = \underline{6.2} = 6 \text{ pounds}$$

Weight	Frequency	Weight x frequency
4	2	8
5	5	25
6	4	24
7	6	42
8	2	16
9	1	9
Totals	20	124

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.

$$\frac{1842}{30} = \underline{61.4} \text{ (1 dp)}$$

Height	Frequency	Height x frequency
58	1	58
59	5	295
60	3	180
61	7	427
62	4	248
63	6	378
64	4	256
Totals	30	1842



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.

$$\frac{196}{25} = \underline{7.84}$$

Number correct	Frequency	Number correct x frequency
4	1	4
5	3	15
6	2	12
7	5	35
8	2	16
9	6	54
10	6	60
Totals	25	196

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.

$$\frac{42}{18} = 2.\dot{3}$$

$$= \underline{2}$$

Number of errors	Frequency	Number of errors x frequency
0	2	0
1	2	2
2	5	10
3	7	21
4	1	4
5	1	5
Totals	18	42

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.

$$\frac{460}{25} = \underline{18.4}$$

Number of sit-ups	Frequency	Number of sit-ups x frequency
15	1	15
16	4	64
17	1	17
18	9	162
19	3	57
20	2	40
21	5	105
Totals	25	460

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.

$$\frac{444}{50} = 8.88$$

$$= \underline{9 \text{ texts}}$$

Number of texts	Frequency	Number of texts x frequency
5	4	20
6	4	24
7	3	21
8	11	88
9	5	45
10	7	70
11	16	176
Totals	50	444

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.

$$\frac{189}{92} = \underline{2.05} \text{ (2dp)}$$

Number of goals	Frequency	Number of goals x frequency
0	13	0
1	22	22
2	25	50
3	21	63
4	6	24
5	1	5
6	4	24
Totals	92	189

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

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

$$\frac{1292000}{45} = 28711.1$$

$$= \underline{28700}$$

Income	Frequency	Income x frequency
£22 000	3	66 000
£24 000	7	168 000
£26 000	5	130 000
£28 000	8	224 000
£30 000	6	180 000
£32 000	10	320 000
£34 000	6	204 000
Totals	45	1292 000

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.

$$\frac{68}{30} = 2.2\dot{6}$$

No. of visits	Frequency	No. of visits x frequency
0	7	0
1	5	5
2	3	6
3	8	24
4	2	8
5	5	25
Totals	30	68

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.

$$\frac{452}{60} = 7.5\dot{3}$$

= 8 minutes

Waiting time	Frequency	Waiting time x frequency
5	4	20
6	11	66
7	17	119
8	12	96
9	9	81
10	7	70
Totals	60	452

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.

$$\frac{300}{100} = 3$$

Rating	Frequency	Rating x frequency
1	9	9
2	21	42
3	33	99
4	35	140
5	2	10
Totals	100	300