

Frequency tables - Finding the mean and median

1) The number of eggs produced by some hens is counted each day for a month, and the results are summarised in the following table.

| | | | | | |
|------------|---|---|---|---|---|
| No of eggs | 2 | 3 | 4 | 5 | 6 |
| No of days | 7 | 9 | 8 | 4 | 2 |

- (a) Find the mean number of eggs per day.
 (b) Find the median number of eggs per day

2) The table shows the number of spikes on each holly leaf in a sample. Find the mean number of spikes per leaf.

| | | | | | |
|--------------|---|---|---|----|---|
| No of spikes | 3 | 4 | 5 | 6 | 7 |
| No of leaves | 6 | 9 | 5 | 13 | 7 |

- (a) Find the mean number of spikes per leaf.
 (b) Find the median number of spikes per leaf

3) The following frequency table shows the number of pairs of shoes owned by each person in a survey of 75 people.

| | | | | | | | |
|--------------|---|----|----|----|----|---|---|
| No of pairs | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| No of people | 3 | 17 | 21 | 14 | 11 | 5 | 4 |

- (a) Find the mean no of pairs per person.
 (b) Find the median no of pairs per person.

4) The following frequency table shows the number of dandelions counted in each square metre of a field.

| | | | | | | |
|------------------|---|----|----|----|----|----|
| No of dandelions | 0 | 1 | 2 | 3 | 4 | 5 |
| Frequency | 5 | 11 | 13 | 21 | 36 | 14 |

- (a) Find the mean number of dandelions per square metre.
 (b) Find the median number of dandelions per square metre.

Mean of Grouped Frequency Distribution

1) The following grouped frequency table shows the lengths of 80 leaves from a tree. Find the mean length of these leaves.

| | | | | | | |
|--------------|-----|-----|-----|------|-------|-------|
| Length (cm) | 2-4 | 4-6 | 6-8 | 8-10 | 10-15 | 15-25 |
| No of leaves | 6 | 13 | 24 | 31 | 4 | 2 |

2) A survey of a firm's salaries reveals the following data:

| | | | | | | |
|---------------------|------|-------|-------|-------|-------|-------|
| Annual wage (£1000) | 8-10 | 10-15 | 15-20 | 20-25 | 25-30 | 30-60 |
| No of employees | 38 | 96 | 61 | 29 | 12 | 4 |

Calculate the mean wage of the firm's employees.

3) A sample of 400 eggs is taken from each of two farms. The masses are as follows:

| | | | | | | |
|--------------------|---------|---------|---------|---------|---------|---------|
| Mass (g) | 55 - 60 | 60 - 65 | 65 - 70 | 70 - 75 | 75 - 80 | 80 - 90 |
| FARM A: No of eggs | 13 | 48 | 82 | 155 | 88 | 14 |
| FARM B: No of eggs | 31 | 67 | 73 | 105 | 86 | 38 |

- (a) Find the mean mass of the eggs from Farm A
 (b) Find the mean mass of the eggs from Farm B