

# Summer Term Maths Year 10

Day  
**3**

Week 10

## Find the mean from a frequency table

- 1** This table shows how many words there are on each line on one page of a book.

Words on a line	Frequency
10	2
11	4
12	5
13	8
14	6

- a) How many lines were there on the page? **25**
- b) Work out the mean number of words on each line of the book.  
**12.48 ~ 12**

- 2** The table shows the number of bedrooms in 1,000 houses in a town.  
The table is incomplete.

Number of bedrooms	1	2	3	4	5	6
Number of houses	33	124	237	380	186	

- a) How many houses have six bedrooms? **40**
- b) What is the modal number of bedrooms? **4**
- c) Find the mean number of bedrooms in the house. **3.682 ~ 4**

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**3** Ron was trying to estimate the mean average mass of some rocks he collected. Complete the table.

Mass, $m$ (g)	Frequency	Midpoint	$f \times m.p.$
$10 < m \leq 30$	6	20	$6 \times 20 = 120$
$30 < m \leq 50$	11	40	$11 \times 40 = 440$
$50 < m \leq 70$	24	60	$24 \times 60 = 1440$
$70 < m \leq 90$	26	80	$26 \times 80 = 2080$
	<b>67</b>		<b>4080</b>

Complete the calculation to find an estimate of the mean mass of the rocks.

$$\frac{\text{total mass}}{\text{total frequency}} = \frac{4080}{67} = 60.9$$

**4** The waiting time in a queue at the supermarket is shown in the table.

Time, $t$ (min)	Frequency	Midpoint	$f \times m.p.$
$0 < t \leq 3$	20	1.5	$1.5 \times 20 = 30$
$3 < t \leq 4$	15	3.5	$3.5 \times 15 = 52.5$
$4 < t \leq 5$	8	4.5	$4.5 \times 8 = 36$
$5 < t \leq 10$	2	7.5	$7.5 \times 2 = 15$

45

133.5

a) Work out an estimate for the mean waiting time at the supermarket.

**2.96 ~ 3.0**

b) Write the modal class of the waiting times.

**$0 < t \leq 3$**