

Estimating the Mean L2 Mark Scheme

1

Time	Frequency	Midpoint	Midpoint × Frequency
60 – 80	53	70	3710
81 – 100	91	90.5	8235.5
101 – 120	94	110.5	10387
121 – 140	62	130.5	8091
Total	300	Total	30423.5

[2]

$$30423.5 \div 300$$

[1]

101 mins (nearest whole number)

[1]

2

Number of Pets	Frequency	Midpoint	Midpoint × Frequency
0	7	0	0
1 – 2	12	1.5	18
3 – 6	4	4.5	18
7 – 9	2	8	16
Total	25	Total	52

[2]

$$52 \div 25$$

[1]

2 (nearest whole number)

[1]

3

Number of Outpatients	Frequency	Midpoint	Midpoint × Frequency
0 – 99	116	49.5	5742
100 – 199	112	149.5	16744
200 – 299	77	249.5	19211.5
300 – 399	60	349.5	20970
Total	365	Total	62667.5

[2]

$$62667.5 \div 365$$

[1]

172 (nearest whole number)

[1]

4	<table border="1"> <thead> <tr> <th>Age</th> <th>Frequency</th> <th>Midpoint</th> <th>Midpoint × Frequency</th> </tr> </thead> <tbody> <tr> <td>0 – 17</td> <td>155</td> <td>8.5</td> <td>1317.5</td> </tr> <tr> <td>18 – 30</td> <td>305</td> <td>24</td> <td>7320</td> </tr> <tr> <td>31 – 64</td> <td>239</td> <td>47.5</td> <td>11352.5</td> </tr> <tr> <td>65 – 75</td> <td>83</td> <td>70</td> <td>5810</td> </tr> <tr> <td>Total</td> <td>782</td> <td>Total</td> <td>25800</td> </tr> </tbody> </table>	Age	Frequency	Midpoint	Midpoint × Frequency	0 – 17	155	8.5	1317.5	18 – 30	305	24	7320	31 – 64	239	47.5	11352.5	65 – 75	83	70	5810	Total	782	Total	25800	[2]				
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6(b)	1375×25	[1] Allow process to multiply average number of sales a week by no. of weeks and 25																												
£34375	[1] Allow answer in range 34370 – 34380																													