

Pie Charts Mark Scheme														
1(a)	<table border="1"> <thead> <tr> <th>Frequency</th> <th>Angle</th> </tr> </thead> <tbody> <tr> <td>20</td> <td>120</td> </tr> <tr> <td>15</td> <td>90</td> </tr> <tr> <td>8</td> <td>48</td> </tr> <tr> <td>17</td> <td>102</td> </tr> <tr> <td>60</td> <td>360</td> </tr> </tbody> </table>	Frequency	Angle	20	120	15	90	8	48	17	102	60	360	<p>[1] Any two values correct</p> <p>[1] Any four values correct</p> <p>[1] All six values correct</p>
Frequency	Angle													
20	120													
15	90													
8	48													
17	102													
60	360													
1(b)		[3] Correct pie chart												
2(a)	Chocolate	[1] Correct answer												
2(b)	Crisps and sweets	[1] Correct answer												
2(c)	No because the total number of people asked is not known	[1] No with valid reason												
3(a)	10	[1] 10												
	because one quarter of 40 is 10	[1] valid explanation												
3(b)	$\frac{6}{40} (= \frac{3}{20})$	[1] For correct numerator												
	$\frac{6}{40} (= \frac{3}{20})$	[1] For correct denominator												
4(a)	<table border="1"> <thead> <tr> <th>Frequency</th> <th>Angle</th> </tr> </thead> <tbody> <tr> <td>15</td> <td>45</td> </tr> <tr> <td>24</td> <td>72</td> </tr> <tr> <td>20</td> <td>60</td> </tr> <tr> <td>21</td> <td>63</td> </tr> <tr> <td>40</td> <td>120</td> </tr> </tbody> </table>	Frequency	Angle	15	45	24	72	20	60	21	63	40	120	<p>[1] Any two values correct</p> <p>[1] Any three values correct</p> <p>[1] All five values correct</p>
Frequency	Angle													
15	45													
24	72													
20	60													
21	63													
40	120													
4(b)	Correct pie chart	[3] Correct pie chart												

Turn over ►

5	7 students	[1]
6	$40\text{-}59 \text{ males} \approx 108^\circ, \frac{108^\circ}{360} = 0.3$ $0.3 \times 250 = 75 \text{ men}$	[1] Number of men in the 40-59 age group
	$40\text{-}59 \text{ females} \approx 72^\circ, \frac{72^\circ}{360} = 0.2$	[1] Same number of women in age group
	$\frac{75}{0.2} = 375 \text{ female members in total}$	[1] Total number of women

END