

Probability Tables L2 Mark Scheme																																																													
1(a)	$\frac{7}{20}$	[1]																																																											
1(b)	$\frac{3}{20}$	[1]																																																											
1(c)	$\frac{6}{9}$	[1] Allow simplified form																																																											
1(d)	$\frac{6}{10}$	[1] Allow simplified form																																																											
2(a)	<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th colspan="2"></th> <th colspan="6">Die</th> </tr> <tr> <th colspan="2"></th> <th>1</th> <th>2</th> <th>3</th> <th>4</th> <th>5</th> <th>6</th> </tr> </thead> <tbody> <tr> <th rowspan="6" style="writing-mode: vertical-rl; transform: rotate(180deg);">Die</th> <th>1</th> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> </tr> <tr> <th>2</th> <td>2</td> <td>4</td> <td>6</td> <td>8</td> <td>10</td> <td>12</td> </tr> <tr> <th>3</th> <td>3</td> <td>6</td> <td>9</td> <td>12</td> <td>15</td> <td>18</td> </tr> <tr> <th>4</th> <td>4</td> <td>8</td> <td>12</td> <td>16</td> <td>20</td> <td>24</td> </tr> <tr> <th>5</th> <td>5</td> <td>10</td> <td>15</td> <td>20</td> <td>25</td> <td>30</td> </tr> <tr> <th>6</th> <td>6</td> <td>12</td> <td>18</td> <td>24</td> <td>30</td> <td>36</td> </tr> </tbody> </table>			Die								1	2	3	4	5	6	Die	1	1	2	3	4	5	6	2	2	4	6	8	10	12	3	3	6	9	12	15	18	4	4	8	12	16	20	24	5	5	10	15	20	25	30	6	6	12	18	24	30	36	[3]
		Die																																																											
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<p>3(a)</p>	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td colspan="2" rowspan="2"></td> <td colspan="6" style="background-color: #cccccc;">Die</td> </tr> <tr> <td style="background-color: #cccccc;">1</td> <td style="background-color: #cccccc;">2</td> <td style="background-color: #cccccc;">3</td> <td style="background-color: #cccccc;">4</td> <td style="background-color: #cccccc;">5</td> <td style="background-color: #cccccc;">6</td> </tr> <tr> <td rowspan="5" style="background-color: #cccccc; writing-mode: vertical-rl; transform: rotate(180deg);">Spinner</td> <td style="background-color: #cccccc;">1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> <td>7</td> </tr> <tr> <td style="background-color: #cccccc;">2</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> <td>7</td> <td>8</td> </tr> <tr> <td style="background-color: #cccccc;">3</td> <td>4</td> <td>5</td> <td>6</td> <td>7</td> <td>8</td> <td>9</td> </tr> <tr> <td style="background-color: #cccccc;">4</td> <td>5</td> <td>6</td> <td>7</td> <td>8</td> <td>9</td> <td>10</td> </tr> <tr> <td style="background-color: #cccccc;">5</td> <td>6</td> <td>7</td> <td>8</td> <td>9</td> <td>10</td> <td>11</td> </tr> </table>			Die						1	2	3	4	5	6	Spinner	1	2	3	4	5	6	7	2	3	4	5	6	7	8	3	4	5	6	7	8	9	4	5	6	7	8	9	10	5	6	7	8	9	10	11	<p>[3]</p>
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<p>3(e)</p>	<p><i>D1, S2</i> <i>D1, S3</i> ⋮ <i>D3, S5</i> <i>D4, S5</i></p>	<p>[1] Lists all possible outcomes</p>																																																		
	<p>$\frac{10}{30}$</p>	<p>[1] Allow simplified form</p>																																																		

4(a)	<table border="1"> <thead> <tr> <th colspan="2" rowspan="2"></th> <th colspan="4">Serving</th> <th rowspan="2">Total</th> </tr> <tr> <th>Standard</th> <th>Halal</th> <th>Kosher</th> <th>Vegetarian</th> </tr> </thead> <tbody> <tr> <th rowspan="2">Seating Type</th> <th>Business</th> <td>23</td> <td>10</td> <td>15</td> <td>21</td> <td>69</td> </tr> <tr> <th>Economy</th> <td>40</td> <td>21</td> <td>22</td> <td>36</td> <td>119</td> </tr> <tr> <th colspan="2">Total</th> <td>63</td> <td>31</td> <td>37</td> <td>57</td> <td>188</td> </tr> </tbody> </table>			Serving				Total	Standard	Halal	Kosher	Vegetarian	Seating Type	Business	23	10	15	21	69	Economy	40	21	22	36	119	Total		63	31	37	57	188	[2]
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	Max capacity = 188	[1]																															
4(b)	$\frac{36}{188}$	[1] Allow simplified form																															
4(c)	$\frac{46}{188}$	[1] Allow simplified form																															
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5(a)	<table border="1"> <thead> <tr> <th colspan="2" rowspan="2"></th> <th colspan="4">Age group</th> <th rowspan="2">Total</th> </tr> <tr> <th>18-29</th> <th>30-49</th> <th>50-64</th> <th>65+</th> </tr> </thead> <tbody> <tr> <th rowspan="2">Marital Status</th> <th>Married</th> <td>38</td> <td>45</td> <td>23</td> <td>67</td> <td>173</td> </tr> <tr> <th>Not Married</th> <td>56</td> <td>30</td> <td>32</td> <td>19</td> <td>137</td> </tr> <tr> <th colspan="2">Total</th> <td>94</td> <td>75</td> <td>55</td> <td>86</td> <td>310</td> </tr> </tbody> </table>			Age group				Total	18-29	30-49	50-64	65+	Marital Status	Married	38	45	23	67	173	Not Married	56	30	32	19	137	Total		94	75	55	86	310	[3]
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5(b)	$\frac{173}{310}$	[1]																															
5(c)	$\frac{94 + 75}{310} = \frac{169}{310}$	[1]																															
5(d)	$\frac{19}{86}$	[1]																															
5(e)	$\frac{135}{173}$	[1]																															
5(f)	$\frac{38}{310} \times 54000000$	[1] Allow ecf from part (a)																															
	6620000	[1]																															