



MATHEMATICS MAIN PAPER FOR 2016 ENTRY TEST 2 - ANSWERS

1 mark for each correct answer. Total 60 marks.

ANSWER	
1a	$\begin{array}{r} 70200 \\ \dots\dots\dots \\ 7020 \\ 702 \\ \dots\dots\dots \\ 70\cdot2 \\ \dots\dots\dots \\ 7\cdot02 \\ \dots\dots\dots \\ 0\cdot702 \end{array}$
1b	$\begin{array}{r} 0\cdot032 \\ \dots\dots\dots \\ 0\cdot64 \\ 12\cdot8 \\ \dots\dots\dots \\ 256 \end{array}$
1c	$\begin{array}{r} 1 \\ \dots\dots\dots \\ \frac{3}{4} \\ \frac{1}{2} \\ \frac{1}{4} \\ \dots\dots\dots \\ 0 \\ \dots\dots\dots \\ -\frac{1}{4} \end{array}$
1d	$\begin{array}{r} \frac{2}{3} \\ \dots\dots\dots \\ \frac{5}{6} \\ \dots\dots\dots \\ 1 \\ \dots\dots\dots \\ 1\frac{1}{6} \end{array}$
1e	$\begin{array}{r} 18 \\ 6 \\ 2 \\ \dots\dots\dots \\ \frac{2}{3} \\ \dots\dots\dots \\ \frac{2}{9} \end{array}$

ANSWER	
2a	$\begin{array}{r} 1\ 3\ 9\ + \\ 5\ \boxed{1}\ 7 \\ \hline 6\ 5\ \boxed{6} \end{array}$
2b	$\begin{array}{r} 3\ 3\ 5\ - \\ 1\ \boxed{5}\ 8 \\ \hline \boxed{1}\ 7\ \boxed{7} \end{array}$
2c	$\begin{array}{r} 1\ \boxed{3}\ 8\ x \\ \phantom{1\ 3}\ 7 \\ \hline \boxed{9}\ 6\ 6 \end{array}$
2d	$\boxed{5}\ \boxed{1}$

ANSWER										
3a	<table border="1"> <tr><td>5</td><td>4</td><td>9</td></tr> <tr><td>10</td><td>6</td><td>2</td></tr> <tr><td>3</td><td>8</td><td>7</td></tr> </table>	5	4	9	10	6	2	3	8	7
5	4	9								
10	6	2								
3	8	7								
3b	<table border="1"> <tr><td>5</td><td></td><td>7</td></tr> <tr><td>10</td><td>8</td><td></td></tr> <tr><td></td><td>4</td><td>11</td></tr> </table>	5		7	10	8			4	11
5		7								
10	8									
	4	11								
4a	121									
4b	169									
4c	4									

	ANSWER
5a	90°
5b	150°
5c	270°
6a	£15.50
6b	£6.20
6c	£6.82
6d	20%

	ANSWER
7a	90
7b	.....3.....m
7c	.....8.4.....m
7d	.....3.6.....m <sup>2</sup>

	ANSWER
8a	£7
8b	£3.60
8c	£39.60
8d	£3.40

	ANSWER
9a	<b>£9.57</b>
9b	<b>£4.56</b>
9c	<p>£.....<b>3.65</b>.....</p> <p>and</p> <p>£.....<b>2.59</b>.....</p> <p>and</p> <p>£.....<b>1.49</b>.....</p>

	ANSWER
10a	..... <b>120</b> .....km
10b	..... <b>180</b> .....km
10c	..... <b>15</b> ..... minutes
10d	..... <b>30</b> ..... minutes
10e	..... <b>2</b> ..... hours ..... <b>5</b> ..... minutes

	ANSWER
11a	<b>7m</b>
11b	<b>0700</b> or <b>7a.m.</b> or <b>7 o'clock</b>
11c	<b>9</b>

	ANSWER
12a	12
12b	30cm
12c	6

	ANSWER
13a	False
13b	True
13c	True