

## TIME-SET-1

1	<p>Javed says that his eyes will blink 415 000 000 times in 79 years.</p> <p>(a) Write 415 000 000 in standard form.</p> <p style="text-align: right;"><i>Answer (a)</i> ..... [1]</p> <p>(b) One year is approximately 526 000 minutes. Calculate, correct to the nearest whole number, the average number of times his eyes will blink per minute.</p> <p style="text-align: right;"><i>Answer (b)</i> ..... [1]</p>		
MS-1	a) $4.15 \times 10^8$ final answer cao b) 10 cao	B1 B1	2
2	<p>Carmen spends 5 minutes, correct to the nearest minute, preparing one meal. She spends a total time of <math>T</math> minutes preparing 30 meals. Between what limits does <math>T</math> lie?</p> <p style="text-align: right;"><i>Answer</i> ..... <math>\leq T &lt;</math> ..... [2]</p>		
MS-2	135 165 cao	1,1	<b>SC1</b> 2h 15m and 2h 45m or 2.25 and 2.75 or 135 and 165 reversed or 4.5 and 5.5 seen
3	<p>At 05 06 Mr Ho bought 850 fish at a fish market for \$2.62 each. 95 minutes later he sold them all to a supermarket for \$2.86 each.</p> <p>(a) What was the time when he sold the fish?</p> <p style="text-align: right;"><i>Answer(a)</i> ..... [1]</p>		
MS-3	(a) 06 41	1	Allow 6.41(am). 6:41 and 06:41 Not 6h41m or 641h or 6.41pm

4	<p>A cyclist left Melbourne on Wednesday 21 May at 09 45 to travel to Sydney. The journey took 97 hours.</p> <p>Write down the day, date and time that the cyclist arrived in Sydney.</p>		
	<i>Answer</i> Day ..... Date ..... Time ..... [3]		
MS-4	Sunday (May) 25 1045	1, 1, 1	Independent
5	<p>A hummingbird beats its wings 24 times per second.</p> <p>(a) Calculate the number of times the hummingbird beats its wings in one hour.</p> <p style="text-align: right;"><i>Answer(a)</i> ..... [1]</p> <p>(b) Write your answer to <b>part (a)</b> in standard form.</p> <p style="text-align: right;"><i>Answer(b)</i> ..... [1]</p>		
MS-5	(a) 86400	<b>1</b>	
	(b) $8.64 \times 10^4$	<b>1ft</b>	
6	<p>A train leaves Barcelona at 21 28 and takes 10 hours and 33 minutes to reach Paris.</p> <p>(a) Calculate the time the next day when the train arrives in Paris.</p> <p style="text-align: right;"><i>Answer(a)</i> ..... [1]</p>		

MS-6	(a) (0)8(.)01 (am)	1	Not 8.01pm																								
7	<p>The table shows the opening and closing times of a café.</p> <table border="1"> <thead> <tr> <th></th> <th>Mon</th> <th>Tue</th> <th>Wed</th> <th>Thu</th> <th>Fri</th> <th>Sat</th> <th>Sun</th> </tr> </thead> <tbody> <tr> <td>Opening time</td> <td>0600</td> <td>0600</td> <td>0600</td> <td>0600</td> <td>0600</td> <td>(a)</td> <td>0800</td> </tr> <tr> <td>Closing time</td> <td>2200</td> <td>2200</td> <td>2200</td> <td>2200</td> <td>2200</td> <td>2200</td> <td>1300</td> </tr> </tbody> </table> <p>(a) The café is open for a total of 100 hours each week. Work out the opening time on Saturday.</p> <p style="text-align: right;"><i>Answer(a)</i> ..... [2]</p> <p>(b) The owner decides to close the café at a later time on Sunday. This increases the total number of hours the café is open by 4%. Work out the new closing time on Sunday.</p> <p style="text-align: right;"><i>Answer(b)</i> ..... [1]</p>				Mon	Tue	Wed	Thu	Fri	Sat	Sun	Opening time	0600	0600	0600	0600	0600	(a)	0800	Closing time	2200	2200	2200	2200	2200	2200	1300
	Mon	Tue	Wed	Thu	Fri	Sat	Sun																				
Opening time	0600	0600	0600	0600	0600	(a)	0800																				
Closing time	2200	2200	2200	2200	2200	2200	1300																				
MS-7	(a) (0)700 or 7 am (b) 1700 or 5 pm	2 1	<b>M1</b> $100 - (5 \times \text{their}(22 - 6) + \text{their}(13 - 8))$ or better soi																								
8	<p>The ferry from Helsinki to Travemunde leaves Helsinki at 17 30 on a Tuesday. The journey takes 28 hours 45 minutes.</p> <p>Work out the day and time that the ferry arrives in Travemunde.</p> <p style="text-align: right;"><i>Answer</i> Day ..... Time ..... [2]</p>																										
MS-8	Wednesday 22 15 or 10 15pm	2	<b>B1</b> <b>B1</b>																								

9	<p>Pedro and Eva do their homework. Pedro takes 84 minutes to do his homework.</p> <p>The ratio Pedro's time : Eva's time = 7 : 6.</p> <p>Work out the number of minutes Eva takes to do her homework.</p> <p style="text-align: right;"><i>Answer</i> ..... min [2]</p>		
MS-9		72	<b>2</b>   <b>M1</b> for $84 \div 7$
10	<p>A water pipe has a circular cross section of radius 0.75 cm. Water flows through the pipe at a rate of 16 cm/s.</p> <p>Calculate the time taken for 1 litre of water to flow through the pipe.</p> <p style="text-align: right;"><i>Answer</i> ..... s [3]</p>		
MS-10		35.4 or 35.36 to 35.37	<b>3</b>   <b>M2</b> for $1000 \div (\pi \times 0.75^2 \times 16)$ oe or <b>M1</b> for $\pi \times 0.75^2 \times 16$ oe or $1000 \div (\pi \times 0.75^2)$

11	<p>The time in Lisbon is the same as the time in Funchal.  A plane left Lisbon at 08 30 and arrived in Funchal at 10 20.  It then left Funchal at 12 55 and returned to Lisbon.  The return journey took 15 minutes more.</p> <p>What time did the plane arrive in Lisbon?</p> <p style="text-align: right;"><i>Answer</i> ..... [2]</p>		
MS-11	1500 or 3 <u>pm</u>	2	<b>B1</b> for 1h50 or 2h[0]5 or <b>SC1</b> for 1255 + <i>their</i> 1h50 + 15mins correctly evaluated