

**LEARNER NAME**

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**NATIONAL SENIOR CERTIFICATE**

**MATHEMATICS P2**

**GRADE 11**

**NOVEMBER 2014**

***SPECIAL ANSWER BOOK***

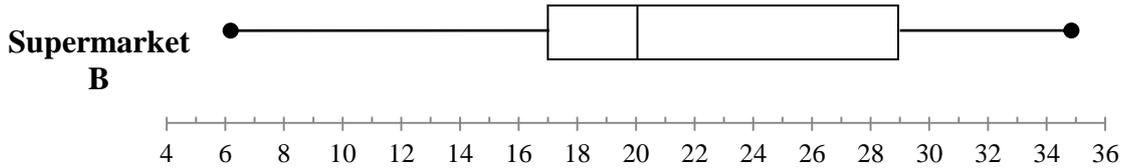
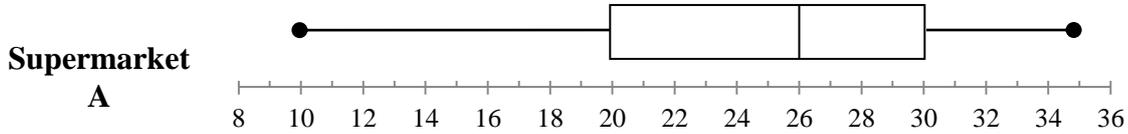
<b>QUESTION</b>	<b>MARK</b>	<b>INITIAL</b>	<b>MOD.</b>
<b>1</b>			
<b>2</b>			
<b>3</b>			
<b>4</b>			
<b>5</b>			
<b>6</b>			
<b>7</b>			
<b>8</b>			
<b>9</b>			
<b>10</b>			
<b>TOTAL</b>			

**This answer book consists of 24 pages.**



**QUESTION 1**

1.1



	<b>Solution</b>	<b>Marks</b>
1.1.1		(2)
1.1.2		(1)
1.1.3		(2)
1.1.4		(2)



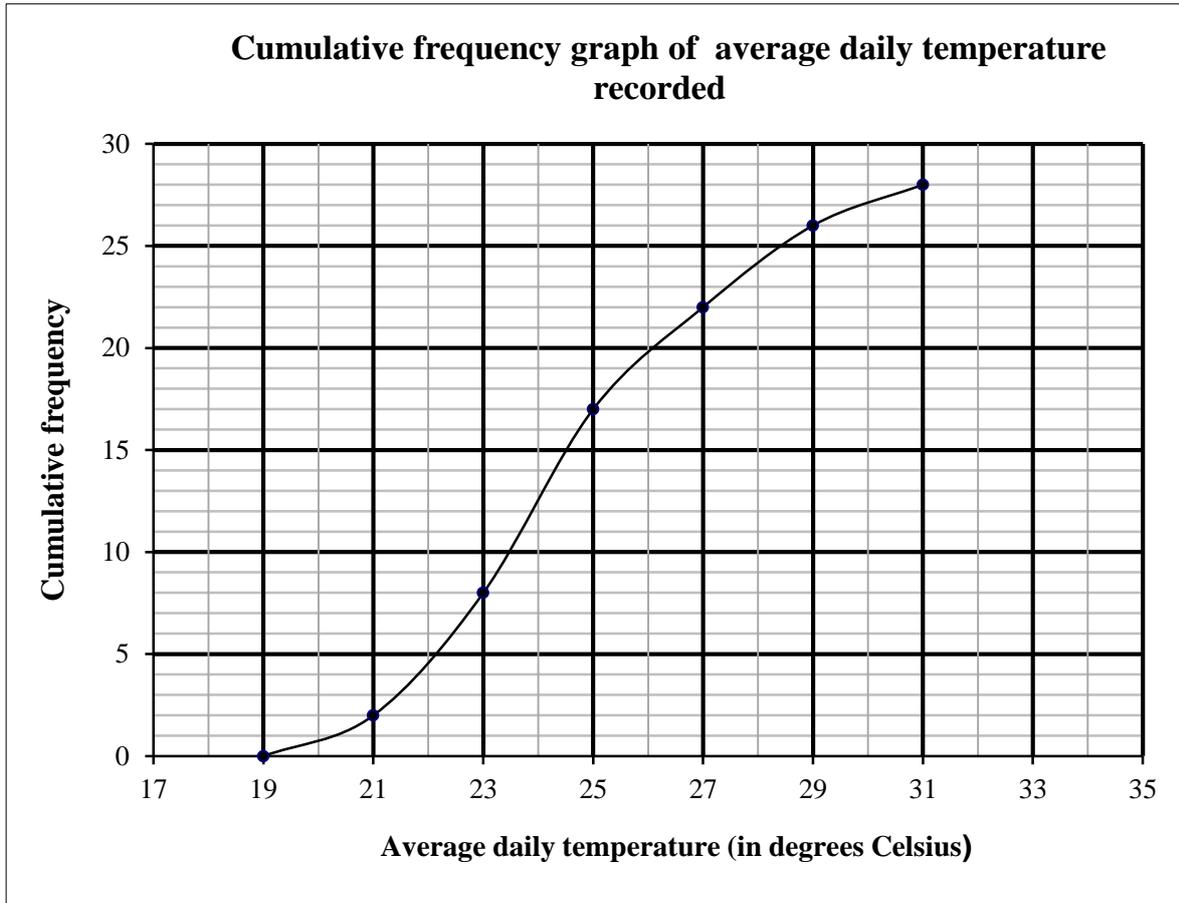
1.2

10	15	20	$x$	30	35	15	31	32	21	$x$	27	28	29
----	----	----	-----	----	----	----	----	----	----	-----	----	----	----

	Solution	Marks
1.2		(3)
		[10]

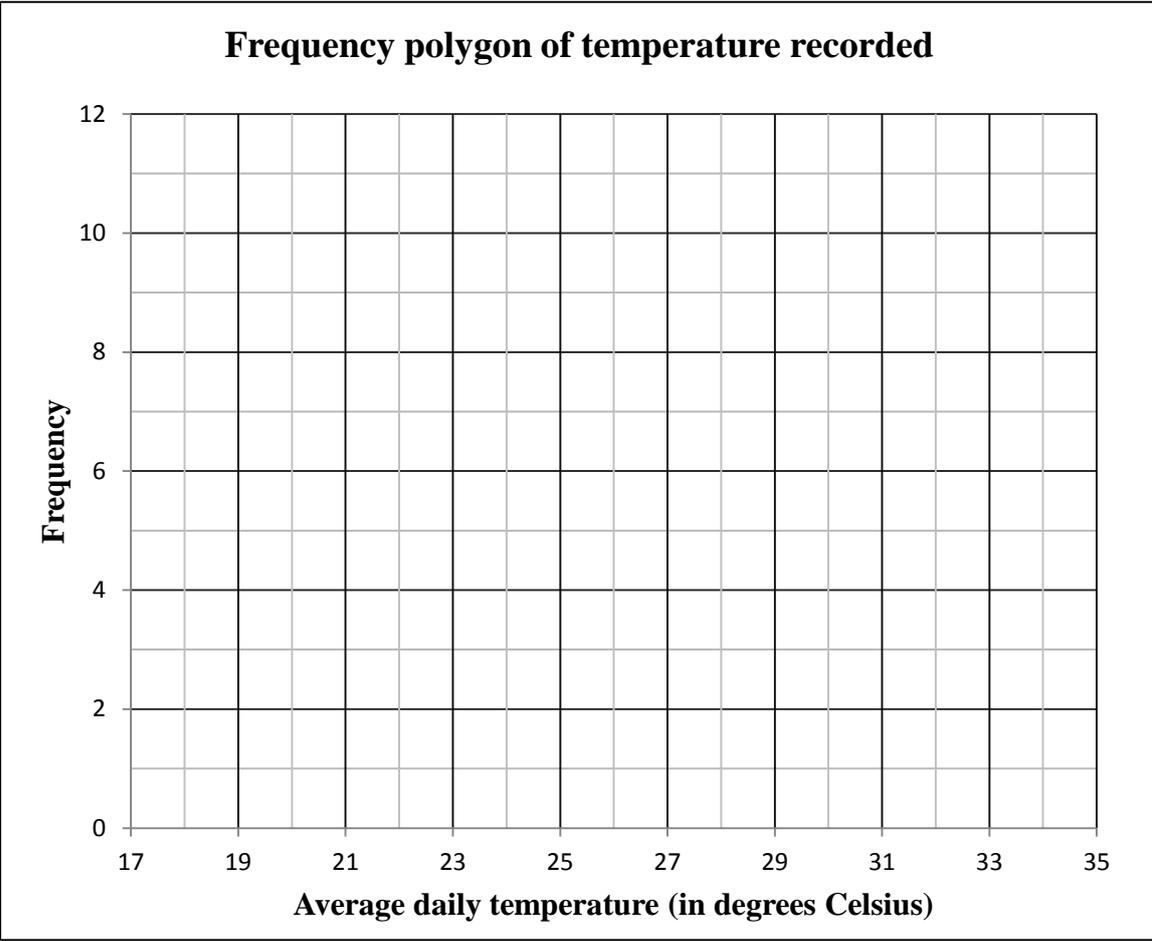


**QUESTION 2**



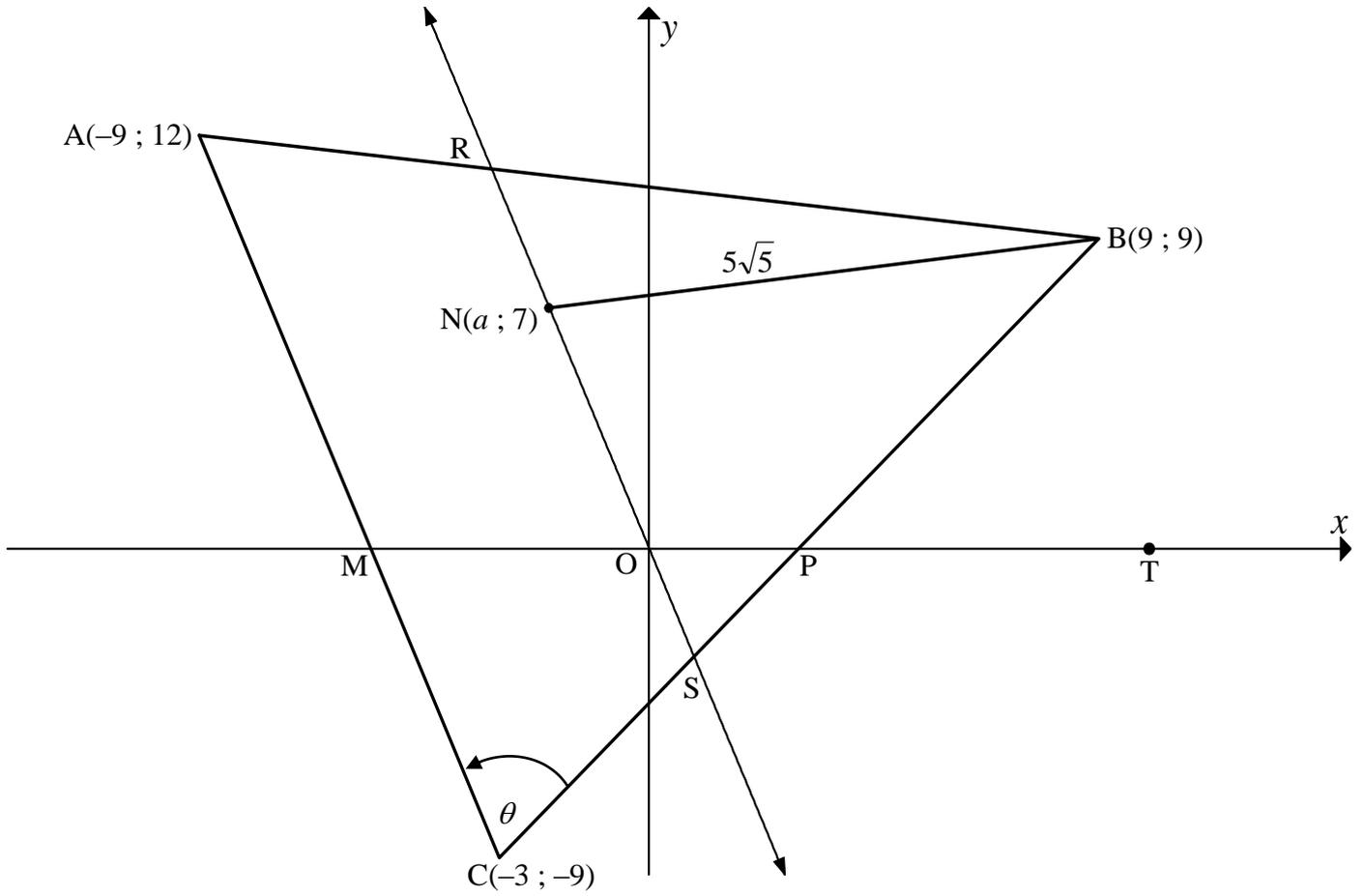
	Solution	Marks														
2.1		(1)														
2.2		(2)														
2.3	<table border="1" style="margin: auto; border-collapse: collapse;"> <thead> <tr> <th style="padding: 5px;">Temperature, T, in degrees Celsius</th> <th style="padding: 5px;">Frequency</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;"><math>19 \leq T &lt; 21</math></td> <td style="padding: 5px;"></td> </tr> <tr> <td style="padding: 5px;"><math>21 \leq T &lt; 23</math></td> <td style="padding: 5px;"></td> </tr> <tr> <td style="padding: 5px;"><math>23 \leq T &lt; 25</math></td> <td style="padding: 5px;"></td> </tr> <tr> <td style="padding: 5px;"><math>25 \leq T &lt; 27</math></td> <td style="padding: 5px;"></td> </tr> <tr> <td style="padding: 5px;"><math>27 \leq T &lt; 29</math></td> <td style="padding: 5px;"></td> </tr> <tr> <td style="padding: 5px;"><math>29 \leq T &lt; 31</math></td> <td style="padding: 5px;"></td> </tr> </tbody> </table>	Temperature, T, in degrees Celsius	Frequency	$19 \leq T < 21$		$21 \leq T < 23$		$23 \leq T < 25$		$25 \leq T < 27$		$27 \leq T < 29$		$29 \leq T < 31$		(3)
Temperature, T, in degrees Celsius	Frequency															
$19 \leq T < 21$																
$21 \leq T < 23$																
$23 \leq T < 25$																
$25 \leq T < 27$																
$27 \leq T < 29$																
$29 \leq T < 31$																



	<b>Solution</b>	<b>Marks</b>
2.4	<p style="text-align: center;"><b>Frequency polygon of temperature recorded</b></p> 	(4)
		<b>[10]</b>



**QUESTION 3**



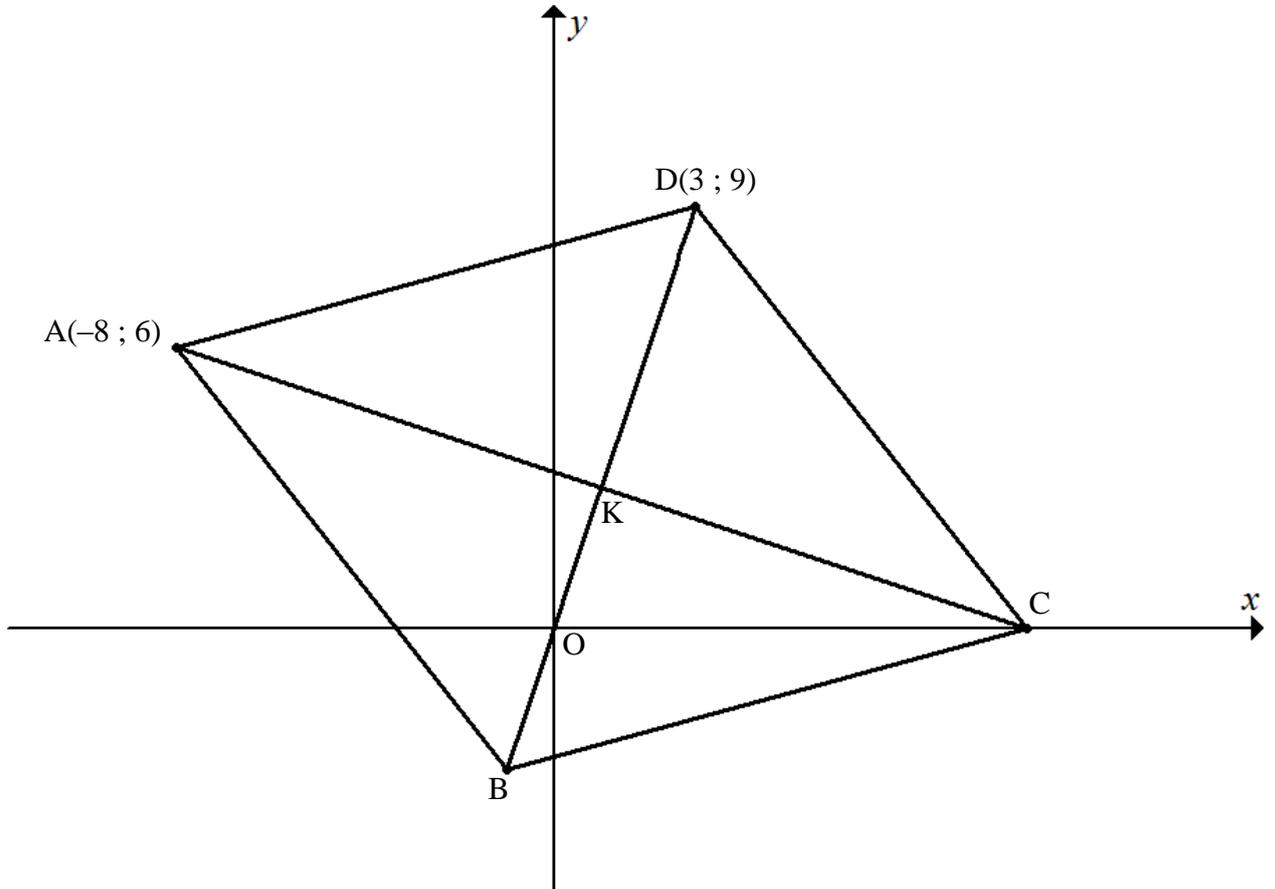
	Solution	Marks
3.1		(2)
3.2		(2)



	<b>Solution</b>	<b>Marks</b>
3.3		
3.4		(4)
		[13]



**QUESTION 4**



	<b>Solution</b>	<b>Marks</b>
4.1		(3)



	<b>Solution</b>	<b>Marks</b>	
4.2			
			(4)
4.3			
			(3)



	<b>Solution</b>	<b>Marks</b>
4.4		(2)
4.5		(5)
		<b>[17]</b>



**QUESTION 5**

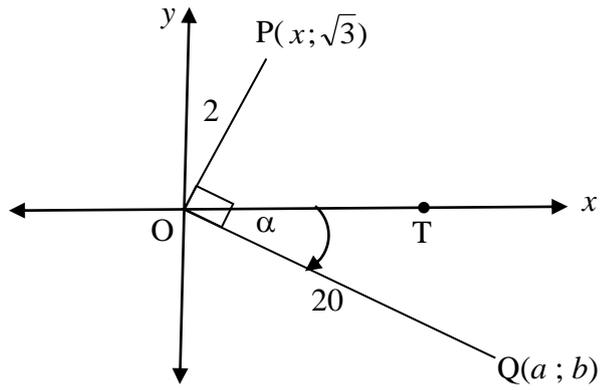
	<b>Solution</b>	<b>Marks</b>
5.1.1		(2)
5.1.2		(3)
5.2		(6)



	<b>Solution</b>	<b>Marks</b>
5.3.1		
(5)		
5.3.2		
(2)		
5.4		
(5)		



5.5



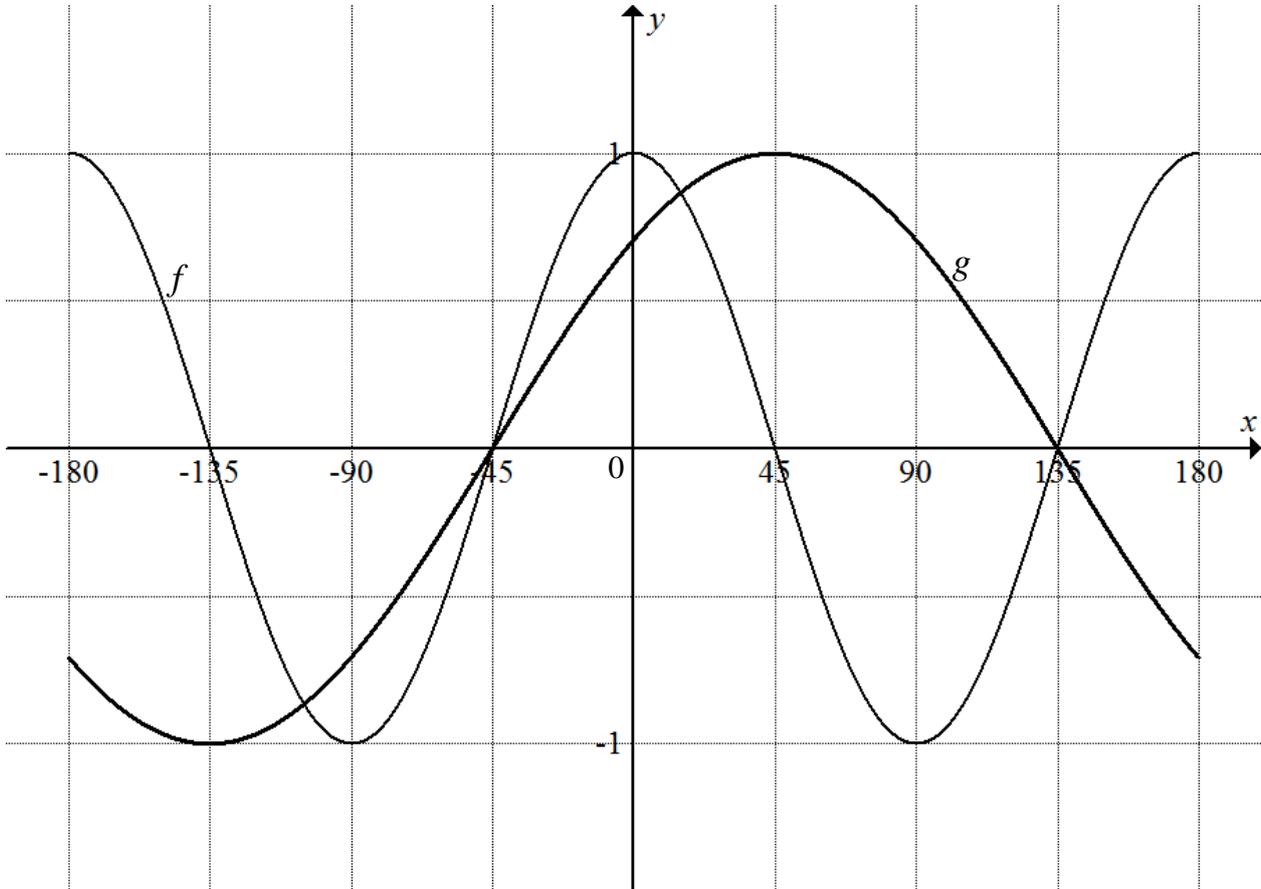
	Solution	Marks
5.5.1		(2)
5.5.2		(3)



	<b>Solution</b>	<b>Marks</b>
5.5.3		
		(5)  <b>[33]</b>



**QUESTION 6**

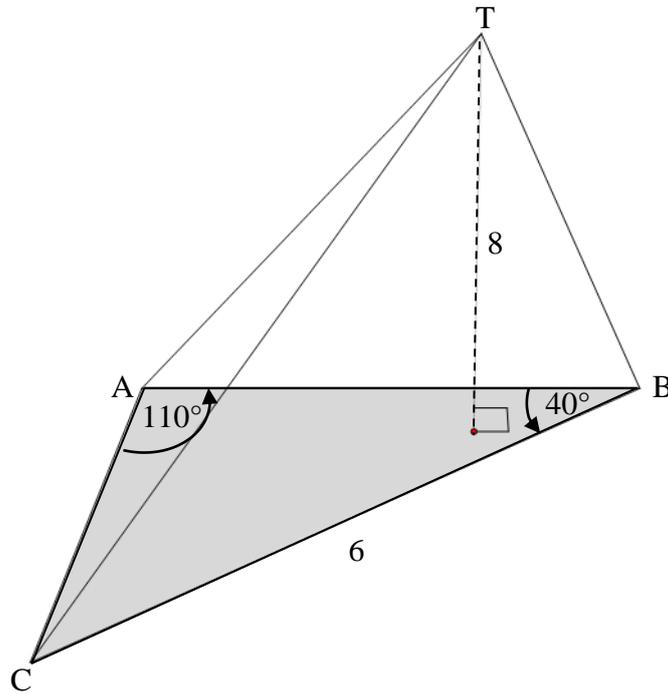


	<b>Solution</b>	<b>Marks</b>
6.1		(3)
6.2		(2)
6.3		(2)
6.4		(2)
6.5		(2)
		<b>[11]</b>



**QUESTION 7**

7.1



	Solution	Marks
7.1.1		(3)
7.1.2		(2)
7.1.3		(3)

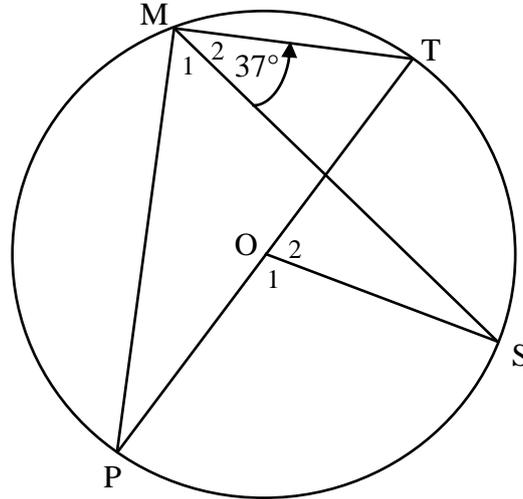




**GIVE REASONS FOR YOUR STATEMENTS AND CALCULATIONS IN QUESTIONS 8, 9 AND 10.**

**QUESTION 8**

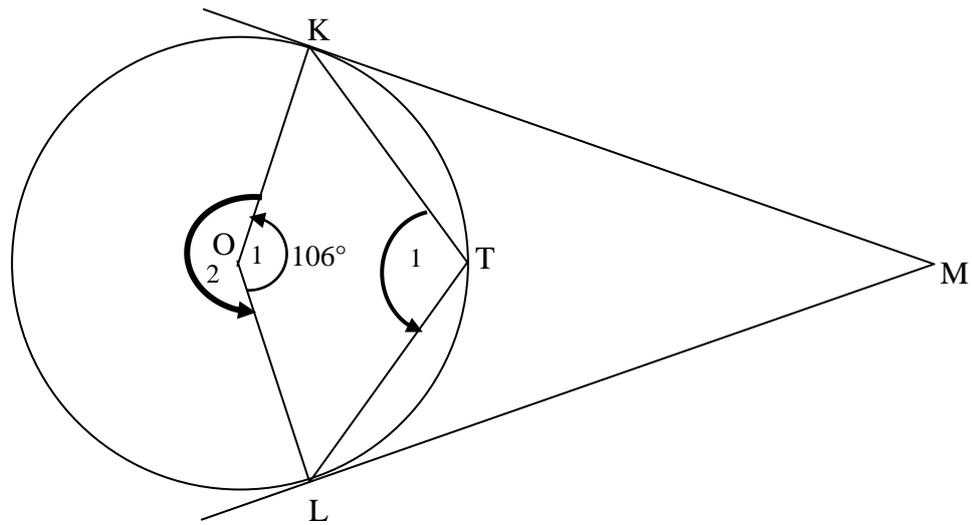
8.1



	Solution	Marks
8.1.1		(2)
8.1.2		(2)



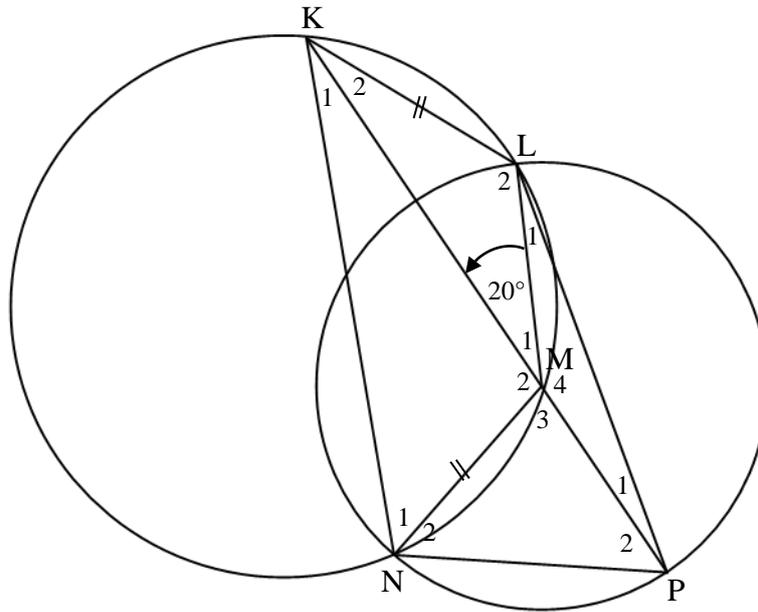
8.2



	Solution	Marks
8.2.1		(3)
8.2.2		(3)
8.2.3		(3)
8.2.4		(2)
		[15]



**QUESTION 9**



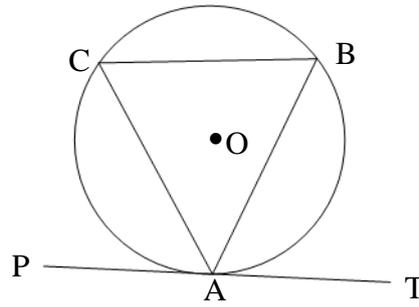
	<b>Solution</b>	<b>Marks</b>
9.1		(2)
9.2		(1)
9.3		(2)



	<b>Solution</b>	<b>Marks</b>
9.4.1		
9.4.2		
		<b>[12]</b>



**QUESTION 10**

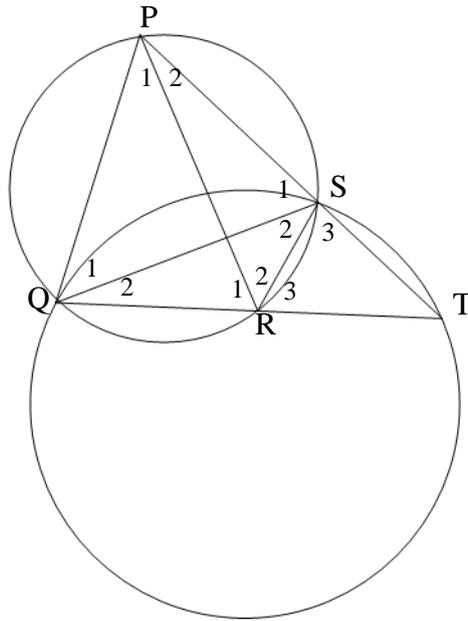


	Solution	Marks
10.1		

(6)



10.2



	Solution	Marks
10.2.1(a)		(1)
10.2.1(b)		(1)
10.2.2		(4)



	<b>Solution</b>	<b>Marks</b>
10.2.3		
	(3)	
	[15]	
	<b>TOTAL:</b>	<b>150</b>

