

NAME OF LEARNER: <i>NAAM VAN LEERDER:</i>	
CLASS: <i>KLAS:</i>	

**NATIONAL SENIOR CERTIFICATE  
*NASIONALE SENIOR SERTIFIKAAT***

**MATHEMATICS P2/*WISKUNDE V2***

**GRADE/*GRAAD* 10**

**NOVEMBER 2018**

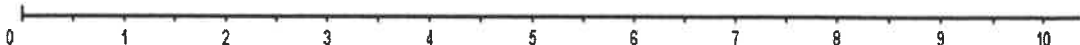
<p><b>SPECIAL ANSWER BOOK <i>SPESIALE ANTWOORDEBOEK</i></b></p>
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QUESTION <i>VRAAG</i>	MARK <i>PUNT</i>			INITIAL <i>PARAAF</i>	MODERATION <i>MODERERING</i>			INITIAL <i>PARAAF</i>
1								
2								
3								
4								
5								
6								
7								
8								
<b>TOTAL <i>TOTAAL</i> (100)</b>								

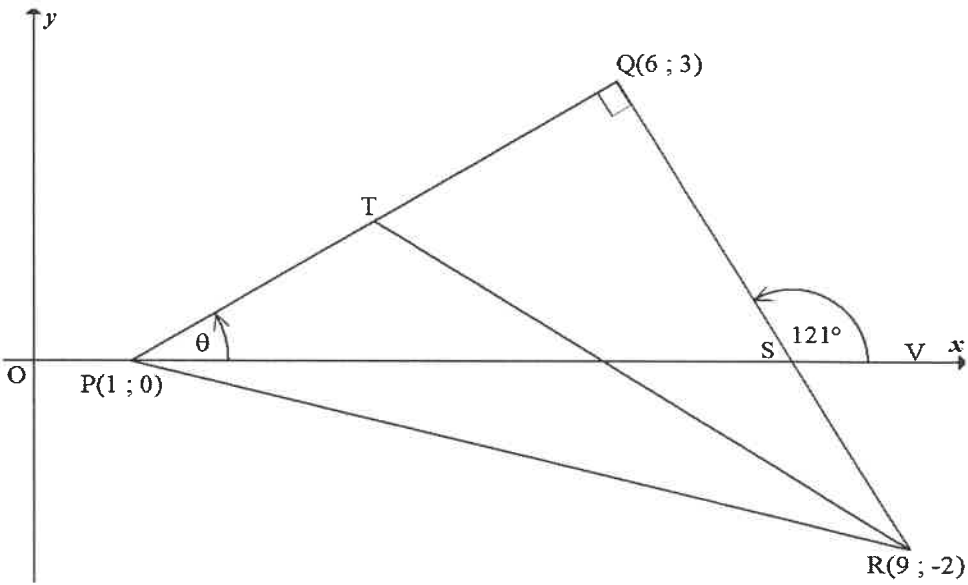
**This answer book consists of 12 pages.  
*Hierdie antwoordeboek bestaan uit 12 bladsye.***

**QUESTION/VRAAG 1**

	<b>Solution/Oplissing</b>	<b>Marks Punte</b>																								
1.1	<table border="1"> <thead> <tr> <th><b>MARKS OBTAINED/ PUNTE BEHAAL</b></th> <th><b>FREQUENCY/ FREKWENSIE</b></th> </tr> </thead> <tbody> <tr><td>0</td><td></td></tr> <tr><td>1</td><td></td></tr> <tr><td>2</td><td></td></tr> <tr><td>3</td><td></td></tr> <tr><td>4</td><td></td></tr> <tr><td>5</td><td></td></tr> <tr><td>6</td><td></td></tr> <tr><td>7</td><td></td></tr> <tr><td>8</td><td></td></tr> <tr><td>9</td><td></td></tr> <tr><td>10</td><td></td></tr> </tbody> </table>	<b>MARKS OBTAINED/ PUNTE BEHAAL</b>	<b>FREQUENCY/ FREKWENSIE</b>	0		1		2		3		4		5		6		7		8		9		10		(2)
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1.3.2		(3)																								

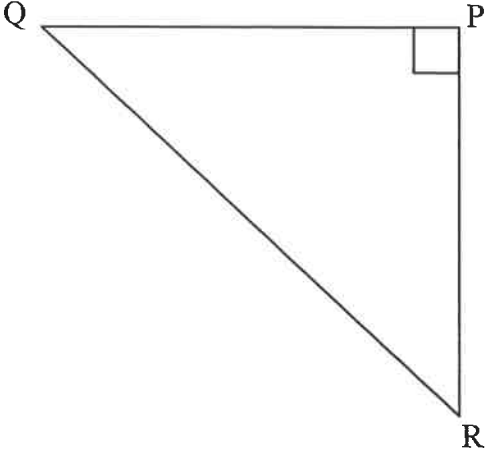
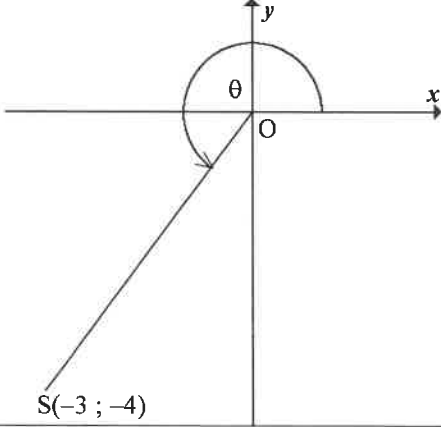
1.4		
1.5		
		(3)
		(3)
		[14]

**QUESTION/VRAAG 2**

	<p><b>Solution/Oplissing</b></p> 	<p><b>Marks Punte</b></p>
2.1.1		(2)
2.1.2		(2)

2.1.3		(2)
2.2.1		(3)
2.2.2		(2)
2.2.3		(3)
2.3		(3)
	[17]	

**QUESTION/VRAAG 3**

	Solution/Oplissing	Marks Punte
		
3.1.1		
		(1)
3.1.2		
		(1)
3.2		
3.2.1		
		(2)
3.2.2		
		(3)

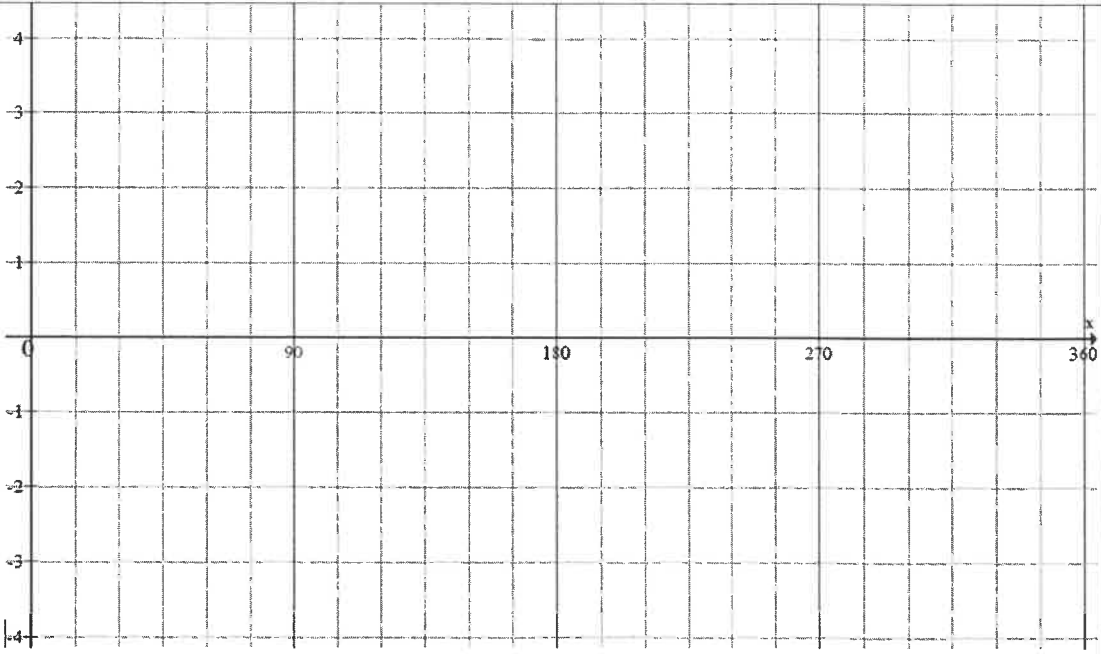
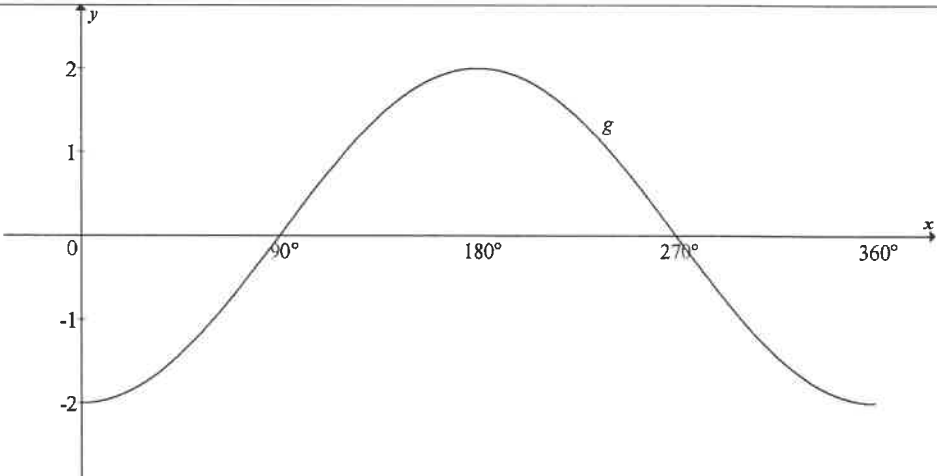
3.3		
		(4)
		[11]

**QUESTION/VRAAG 4**

	Solution/Oplissing	Marks Punte
	<p>The diagram shows a right-angled triangle <math>ABE</math> with the right angle at <math>A</math>. Point <math>C</math> is on <math>BE</math> such that <math>AC \perp CE</math>. Point <math>D</math> is on <math>CE</math> such that <math>AD \perp DE</math>. The length of <math>BC</math> is 20, and the length of <math>AD</math> is 60. The angle <math>BAC</math> is <math>30^\circ</math>.</p>	
4.1.1		(2)
4.1.2		(2)
4.1.3		(3)

4.2.1		(2)
4.2.2		(3)
4.2.3		(3)
		<b>[15]</b>

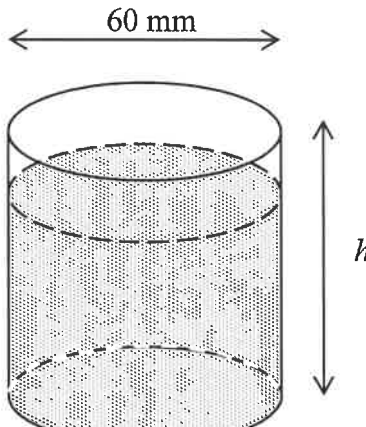
**QUESTION/VRAAG 5**

	Solution/Oplissing	Marks Punte
5.1.1		(3)
5.1.2 (a)		(1)
5.1.2 (b)		(1)
5.2		
5.2.1		(2)
5.2.2		(1)



5.2.3		(2)
5.2.4		(2)
		<b>[12]</b>

**QUESTION/VRAAG 6**

	<b>Solution/Oplissing</b>	<b>Marks/Punte</b>
	 <p>A diagram of a cylinder. A horizontal double-headed arrow above the top circular face is labeled "60 mm". A vertical double-headed arrow to the right of the cylinder is labeled "h". The cylinder is shaded with a stippled pattern to indicate its three-dimensional form.</p>	
6.1		(3)
6.2		(4)
		<b>[7]</b>

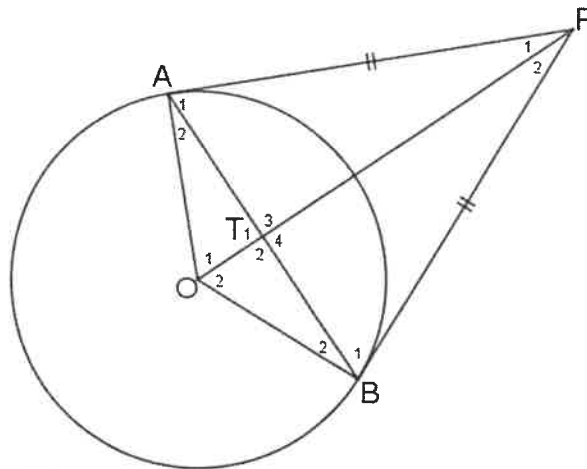
**QUESTION/VRAAG 7**

	<b>Solution/Oplissing</b>	<b>Marks Punte</b>
7.1		(1)
7.2		
7.2.1		(5)
7.2.2		(3)
		<b>[9]</b>

**QUESTION/VRAAG 8**

	Solution/Oplossing	Marks/Punte
8.1		
8.1.1	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	(5)
8.1.2	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	(4)

8.2



8.2.1

8.2.2

(5)

(1)

[15]

**TOTAL/TOTAAL: 100**