



LEARNER'S NAME: <i>LEERDERNAAM:</i>	
--	--

GRADE 10 <i>GRAAD 10</i>	
-----------------------------	--

**NATIONAL/NASIONALE
SENIOR
CERTIFICATE/SERTIFIKAAT**

GRADE 10/GRAAD 10


NOVEMBER 2020

**MATHEMATICS P2/WISKUNDE V2
SPECIAL ANSWER BOOK/SPEZIALE ANTWOORDEBOEK
(EXEMPLAR/EKSEMPLAAR)**

Marker/Merker			Moderator's Initials / Moderator se paraaf							
Question <i>Vraag</i>	Marks <i>Punte</i>	Initial Parafeer	Marks <i>Punte</i>	S M	Marks <i>Punte</i>	D M	Marks <i>Punte</i>	P M	Marks <i>Punte</i>	NM
1										
2										
3										
4										
5										
6										
TOTAL TOTAAL										

This special answer book consists of 14 pages./
Hierdie spesiale antwoordeboek bestaan uit 14 bladsye.

QUESTION 1/VRAAG 1																																		
	Solution / Oplossing	Marks Punte																																
1.1.1	<table border="1"> <thead> <tr> <th>Marks/ Punte</th> <th>Frequency/ Frekwensie</th> <th>Midpoints/ Middelpunt</th> <th>Midpoint \times Frequency/ Middelpt \times Frekwensie</th> </tr> </thead> <tbody> <tr> <td>$0 < x \leq 30$</td> <td>2</td> <td>15</td> <td>30</td> </tr> <tr> <td>$30 < x \leq 40$</td> <td>3</td> <td>35</td> <td>105</td> </tr> <tr> <td>$40 < x \leq 50$</td> <td>11</td> <td>45</td> <td>495</td> </tr> <tr> <td>$50 < x \leq 60$</td> <td>7</td> <td>55</td> <td></td> </tr> <tr> <td>$60 < x \leq 70$</td> <td>3</td> <td></td> <td>195</td> </tr> <tr> <td>$70 < x \leq 80$</td> <td>2</td> <td>75</td> <td>150</td> </tr> <tr> <td>$80 < x \leq 100$</td> <td>0</td> <td>90</td> <td>0</td> </tr> </tbody> </table>	Marks/ Punte	Frequency/ Frekwensie	Midpoints/ Middelpunt	Midpoint \times Frequency/ Middelpt \times Frekwensie	$0 < x \leq 30$	2	15	30	$30 < x \leq 40$	3	35	105	$40 < x \leq 50$	11	45	495	$50 < x \leq 60$	7	55		$60 < x \leq 70$	3		195	$70 < x \leq 80$	2	75	150	$80 < x \leq 100$	0	90	0	(2)
Marks/ Punte	Frequency/ Frekwensie	Midpoints/ Middelpunt	Midpoint \times Frequency/ Middelpt \times Frekwensie																															
$0 < x \leq 30$	2	15	30																															
$30 < x \leq 40$	3	35	105																															
$40 < x \leq 50$	11	45	495																															
$50 < x \leq 60$	7	55																																
$60 < x \leq 70$	3		195																															
$70 < x \leq 80$	2	75	150																															
$80 < x \leq 100$	0	90	0																															
1.1.2		(2)																																
1.1.3	<p style="text-align: center;">FREQUENCY POLYGON OF GRADE 10 MATHEMATICS CLASS FREKWENSIE-POLIGOON VAN GRAAD 10 WISKUNDEKLAS</p> <p style="text-align: center;">GRADE 10 MATHEMATICS MARKS GRAAD 10 WISKUNDEPUNTE</p>	(3)																																
1.1.4 (a)		(2)																																
1.1.4 (b)		(2)																																

1.2	45	49	50	51	51	53	54	57	57	59	60	64	
	65	66	70	71	73	74	75	76	83	89	89		
1.2.1													(1)
1.2.2													(3)
1.2.3													(3)
													
1.2.4													(2)
													[20]

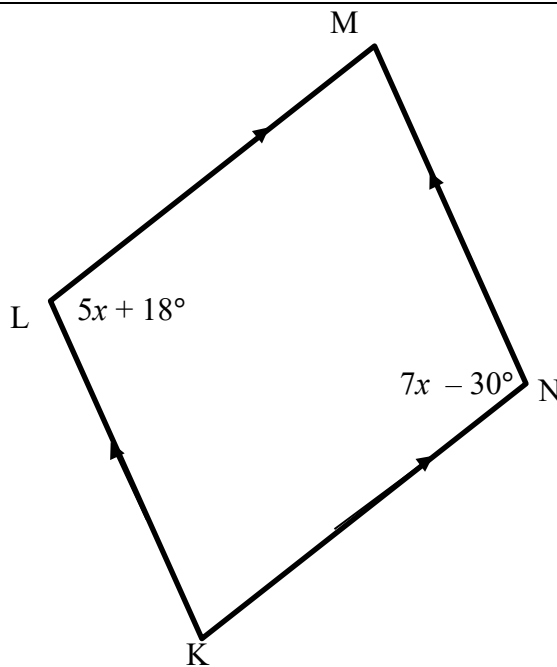
QUESTION 2/VRAAG 2		
	Solution / Oplossing	Marks Punte
	<p>A coordinate plane showing a triangle ABC with vertices A(-2;4), B(-6;-2), and C(8;2). Point P is on side AB and point Q is on side BC. A line segment PQ is drawn.</p>	
2.1	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	(4)
2.2.1	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	(4)

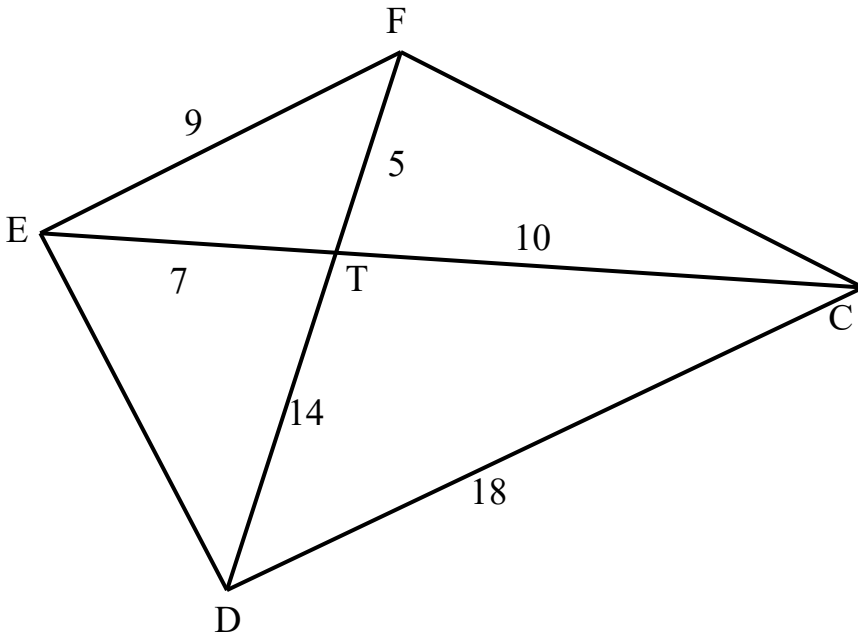
2.2.2		
		(4)
2.3		
		(4)
	[16]	

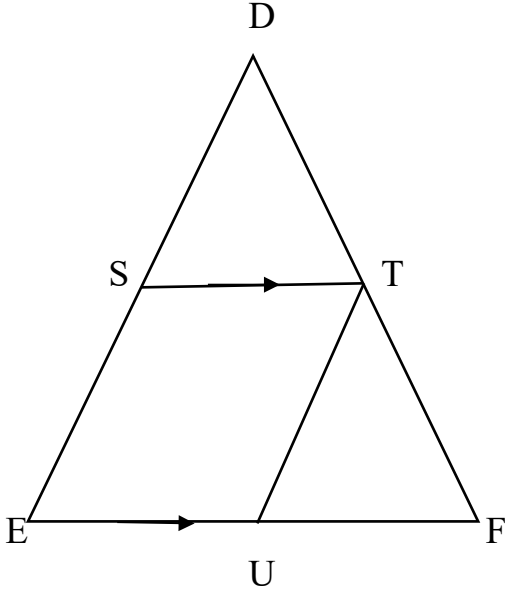
QUESTION 3 / VRAAG 3		
	Solution / Oplossing	Marks Punte
3.1.1		(2)
3.1.2		(2)
3.1.3		(2)
3.2.1		(2)
3.2.2		(3)

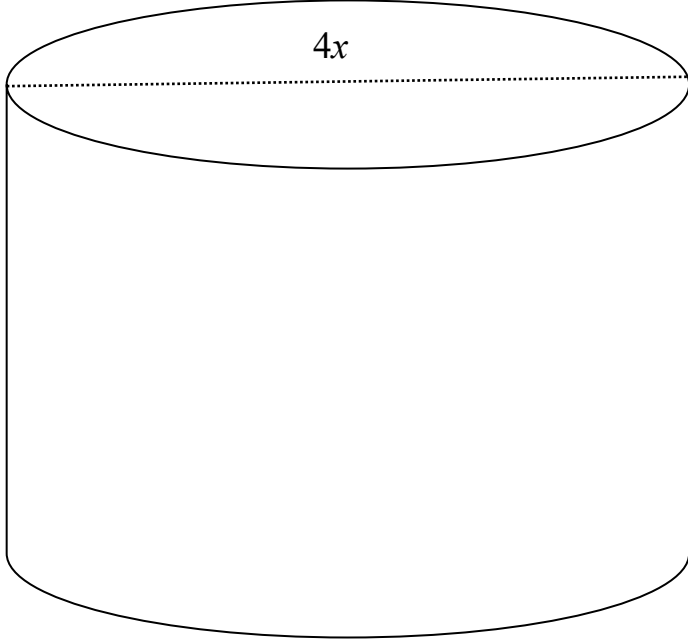
	Solution / <i>Oplossing</i>	Marks <i>Punte</i>
3.3		
	(3)	
3.4		
	(5)	
3.5		
	(2)	
	[21]	

QUESTION 4 / VRAAG 4		
	Solution / Oplossing	Marks Punte
4.1.		(4)
4.2		(1)
4.3		(1)
4.4.1		(2)
4.4.2		(2)
4.5		(2)
		[12]

	Solution / <i>Oplossing</i>	Marks <i>Punte</i>
5.2		
5.2.1	<div style="border-bottom: 1px solid black; height: 20px; width: 100%;"></div> <div style="border-bottom: 1px solid black; height: 20px; width: 100%;"></div> <div style="border-bottom: 1px solid black; height: 20px; width: 100%;"></div> <div style="border-bottom: 1px solid black; height: 20px; width: 100%;"></div> <div style="border-bottom: 1px solid black; height: 20px; width: 100%;"></div> <div style="border-bottom: 1px solid black; height: 20px; width: 100%;"></div> <div style="border-bottom: 1px solid black; height: 20px; width: 100%;"></div>	(4)
5.2.2	<div style="border-bottom: 1px solid black; height: 20px; width: 100%;"></div> <div style="border-bottom: 1px solid black; height: 20px; width: 100%;"></div> <div style="border-bottom: 1px solid black; height: 20px; width: 100%;"></div> <div style="border-bottom: 1px solid black; height: 20px; width: 100%;"></div> <div style="border-bottom: 1px solid black; height: 20px; width: 100%;"></div> <div style="border-bottom: 1px solid black; height: 20px; width: 100%;"></div> <div style="border-bottom: 1px solid black; height: 20px; width: 100%;"></div>	(3)

	Solution / Oplossing	Marks Punte
5.4		
5.4.1	<div style="border: 1px solid black; height: 100px; width: 100%;"></div>	(3)
5.4.2	<div style="border: 1px solid black; height: 100px; width: 100%;"></div>	(3)

	Solution / Oplissing	Marks Punte
5.5.1		
5.5.2		(1)
		(4)
		[28]

QUESTION 6 / VRAAG 6		
	Solution / Oplossing	Marks Punte
	 <p>A diagram of a cylinder. The top circular face is shown in perspective. A horizontal dashed line across the top face represents the diameter, which is labeled $4x$. The vertical height of the cylinder is labeled h.</p>	
		(3)
		[3]
	TOTAL/TOTAAL:	100