



| | |
|---|--|
| LEARNER'S NAME: <i>LEERDER SE NAAM:</i> | |
|---|--|

| | |
|------------------------------------|--|
| GRADE 12 <i>GRAAD 12</i> | |
|------------------------------------|--|

**NATIONAL/NASIONALE
SENIOR
CERTIFICATE/SERTIFIKAAT**

GRADE 12/GRAAD 12

SEPTEMBER 2022

**MATHEMATICS P2/WISKUNDE V2
SPECIAL ANSWER BOOK/SPEZIALE ANTWOORDEBOEK**

| Marker/Merker | | | | Moderator's Initials / Moderator se paraaf | | | | | | | | | | | | |
|-------------------|--------------|--|---------------------|--|--|--------|----------------|--|--------|----------------|--|--------|----------------|--|----|--|
| Question Vraag | Mark Punt | | Initial Parafeer | Marks Punte | | S M | Marks Punte | | D M | Marks Punte | | P M | Marks Punte | | NM | |
| 1 | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | |
| TOTAL TOTAAL | | | | | | | | | | | | | | | | |

This special answer book consists of 18 pages./
Hierdie spesiale antwoordeboek bestaan uit 18 bladsye.

QUESTION 1/VRAAG 1

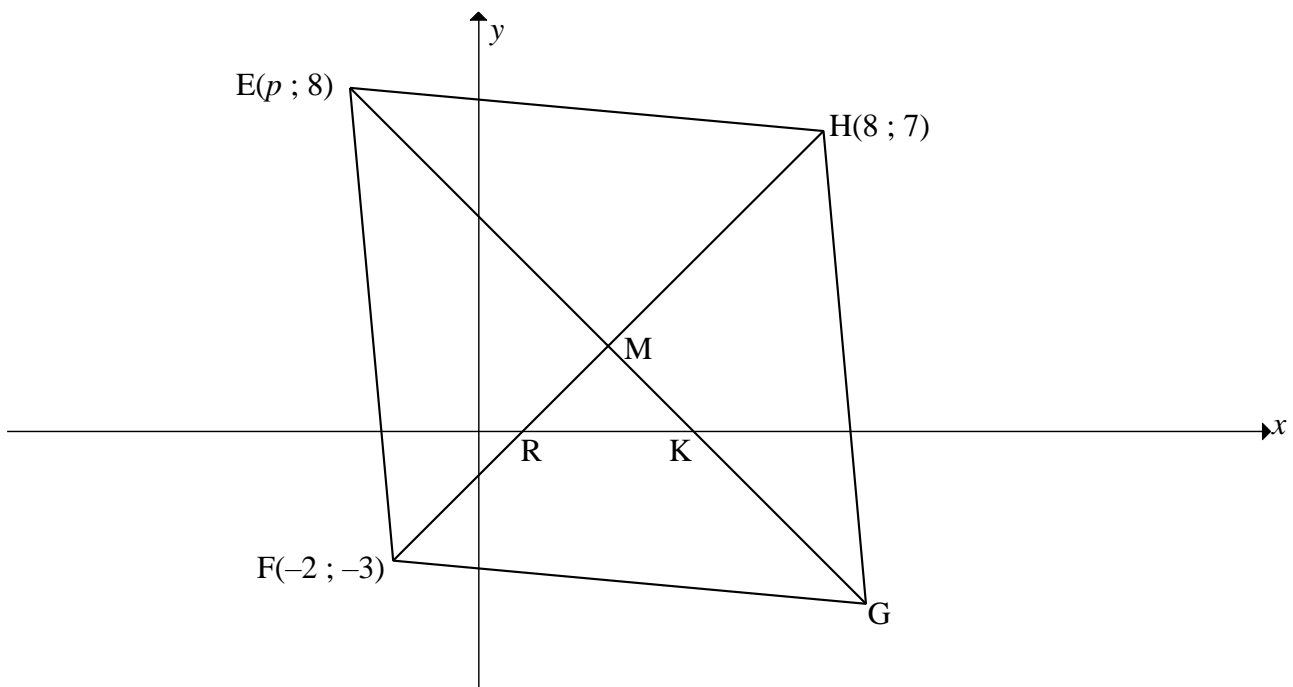
| | Solution/Oplissing | Marks/ Punte | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|--|--|---|--------------------|---|--|--------------------|----|--|--------------------|----|--|--------------------|----|--|--------------------|----|--|--------------------|---|--|--------------------|---|--|--------------------|---|--|--------------------|---|--|-----|
| 1.1 | <table border="1"> <thead> <tr> <th>Distance of Jumps <i>Afstand van Spronge</i> (in cm)</th><th>Number of athletes <i>Aantal atlete</i></th><th>Cumulative Frequency <i>Kumulatiewe Frekwensie</i></th></tr> </thead> <tbody> <tr><td>$420 < d \leq 460$</td><td>6</td><td></td></tr> <tr><td>$460 < d \leq 500$</td><td>14</td><td></td></tr> <tr><td>$500 < d \leq 540$</td><td>16</td><td></td></tr> <tr><td>$540 < d \leq 580$</td><td>42</td><td></td></tr> <tr><td>$580 < d \leq 620$</td><td>14</td><td></td></tr> <tr><td>$620 < d \leq 660$</td><td>2</td><td></td></tr> <tr><td>$660 < d \leq 700$</td><td>3</td><td></td></tr> <tr><td>$700 < d \leq 740$</td><td>2</td><td></td></tr> <tr><td>$740 < d \leq 780$</td><td>1</td><td></td></tr> </tbody> </table> | Distance of Jumps <i>Afstand van Spronge</i> (in cm) | Number of athletes <i>Aantal atlete</i> | Cumulative Frequency <i>Kumulatiewe Frekwensie</i> | $420 < d \leq 460$ | 6 | | $460 < d \leq 500$ | 14 | | $500 < d \leq 540$ | 16 | | $540 < d \leq 580$ | 42 | | $580 < d \leq 620$ | 14 | | $620 < d \leq 660$ | 2 | | $660 < d \leq 700$ | 3 | | $700 < d \leq 740$ | 2 | | $740 < d \leq 780$ | 1 | | (2) |
| Distance of Jumps <i>Afstand van Spronge</i> (in cm) | Number of athletes <i>Aantal atlete</i> | Cumulative Frequency <i>Kumulatiewe Frekwensie</i> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| $420 < d \leq 460$ | 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| $460 < d \leq 500$ | 14 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| $500 < d \leq 540$ | 16 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| $540 < d \leq 580$ | 42 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| $580 < d \leq 620$ | 14 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| $620 < d \leq 660$ | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| $660 < d \leq 700$ | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| $700 < d \leq 740$ | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| $740 < d \leq 780$ | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.2 | <p style="text-align: center;">OGIVE/OGIEF</p> | (4) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.3 | | (2) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.4 | | (2) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | [10] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

QUESTION 2/VRAAG 2

| | | | | | | |
|---|-----|-----|-----|-----|-----|-----|
| Long jumper / Verspringer | 1 | 2 | 3 | 4 | 5 | 6 |
| x: Hours practised / Ure geoefen | 4,5 | 2 | 3,5 | 4 | 8 | 3 |
| y: Distance jumped / Afstand gespring (cm) | 650 | 420 | 580 | 490 | 780 | 525 |

| | Solution/Oplissing | Marks/ Punte |
|-------|---------------------------|-------------------------|
| 2.1 | | (3) |
| | | |
| | | |
| | | |
| 2.2 | | (2) |
| | | |
| | | |
| 2.3 | | (2) |
| | | |
| | | |
| 2.4.1 | | (1) |
| | | |
| | | |
| 2.4.2 | | (1) |
| | | |
| | | |
| 2.4.3 | | (1) |
| | | |
| | | |
| | | [10] |

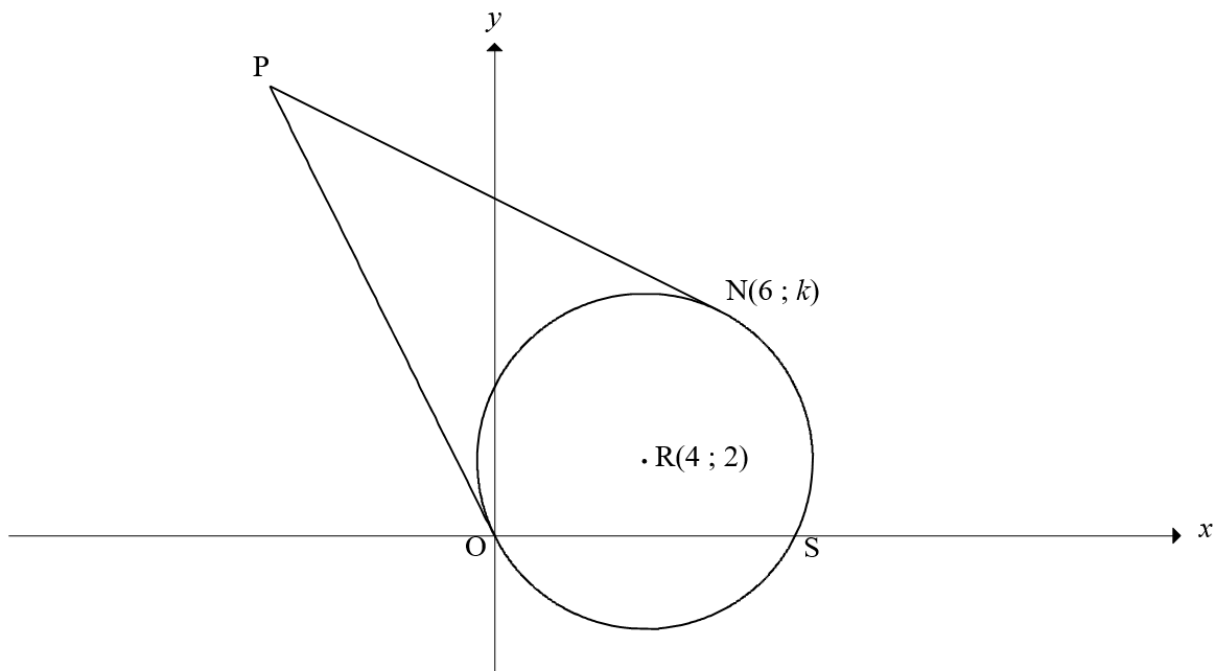
QUESTION 3/VRAAG 3



| | Solution/ <i>Oplossing</i> | Marks/ <i>Punte</i> |
|-------|----------------------------|------------------------|
| 3.1.1 | | (2) |
| | | |
| | | |
| | | |
| | | |
| 3.1.2 | | (2) |
| | | |
| | | |
| | | |
| | | |
| 3.1.3 | | (4) |
| | | |
| | | |
| | | |
| | | |

| | Solution/Oplissing | Marks/ Punte |
|-----|---------------------------|-------------------------|
| 3.2 | | (4) |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| 3.3 | | (2) |
| | | |
| | | |
| | | |
| | | |
| 3.4 | | (3) |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | [17] |

QUESTION 4/VRAAG 4



| | Solution/Oplissing | Marks/ Punte |
|-----|---------------------------|-------------------------|
| 4.1 | | (3) |
| | | |
| | | |
| | | |
| 4.2 | | (4) |
| | | |
| | | |
| | | |
| | | |
| | | |
| 4.3 | | (5) |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

| | Solution/Oplossing | Marks/ Punte |
|-------|---------------------------|-------------------------|
| 4.4.1 | | (3) |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| 4.4.2 | | (4) |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| 4.5 | | (4) |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | [23] |

QUESTION 5/VRAAG 5

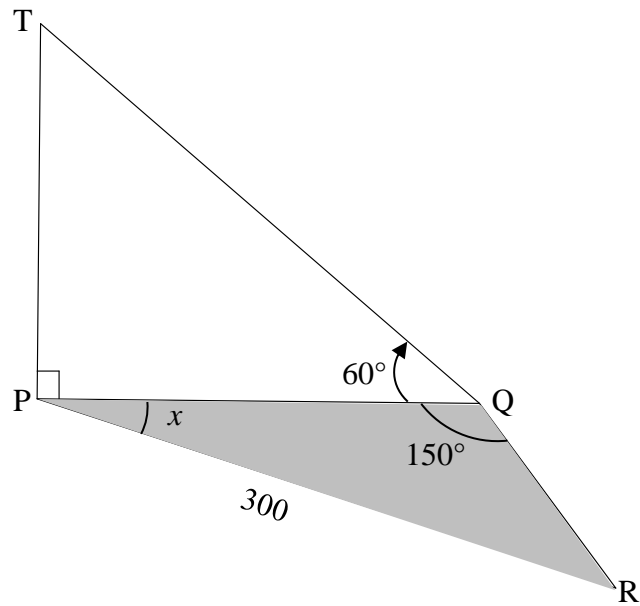
| | Solution/Oplissing | Marks/ Punte |
|-------|---------------------------|-------------------------|
| 5.1.1 | | (2) |
| | | |
| | | |
| | | |
| | | |
| 5.1.2 | | (3) |
| | | |
| | | |
| | | |
| | | |
| 5.1.3 | | (2) |
| | | |
| | | |
| | | |
| | | |
| 5.2.1 | | (5) |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| 5.2.2 | | (4) |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

| | Solution/Oplossing | Marks/ Punte |
|-------|---------------------------|-------------------------|
| 5.3.1 | | (4) |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| 5.3.2 | | (3) |
| | | |
| | | |
| | | |
| | | |
| | | |
| 5.4 | | (7) |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | [30] |

QUESTION 6/VRAAG 6

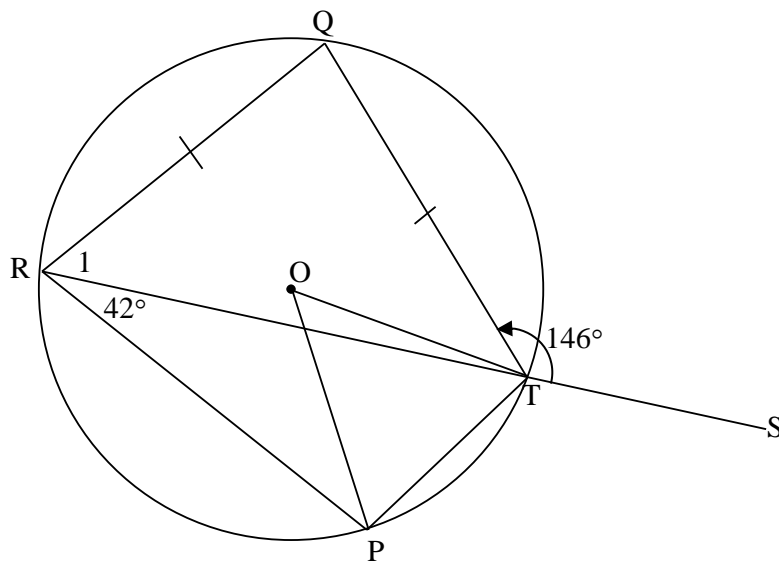
| | Solution/Oplissing | Marks/ Punte |
|-------|--------------------|-----------------|
| 6.1 | | |
| | | (3) |
| 6.2.1 | | |
| | | (1) |
| 6.2.2 | | |
| | | (2) |
| 6.3 | | |
| | | (2) |
| 6.4 | | |
| | | (2) |
| 6.5 | | |
| | | (2) |
| | | [12] |

QUESTION 7/VRAAG 7



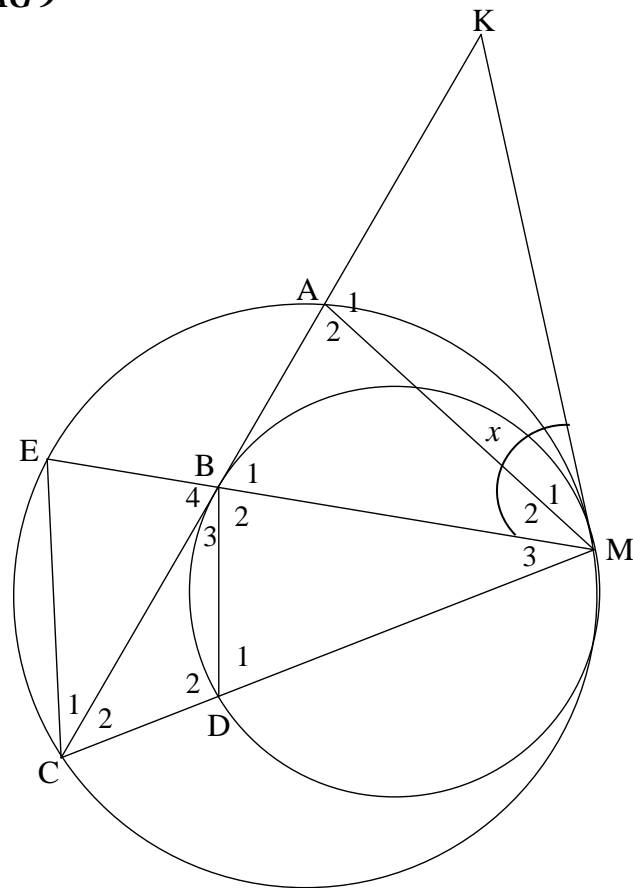
| | Solution/Oplossing | Marks/ Punte |
|-----|---------------------------|-------------------------|
| 7.1 | | (1) |
| | | |
| | | |
| | | |
| 7.2 | | (3) |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| 7.3 | | (4) |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | [8] |

QUESTION 8/VRAAG 8



| | Solution/Oplissing | Marks/ Punte |
|-----|---------------------------|-------------------------|
| 8.1 | | (2) |
| | | |
| | | |
| | | |
| | | |
| 8.2 | | (2) |
| | | |
| | | |
| | | |
| | | |
| 8.3 | | (3) |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | [7] |

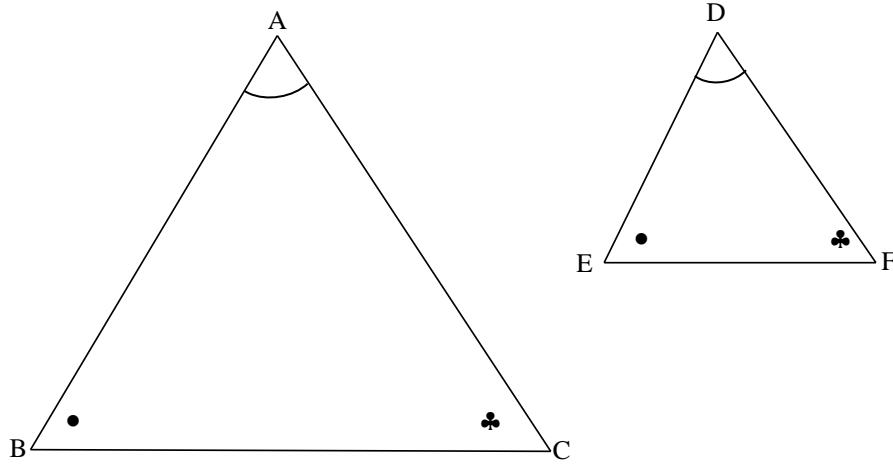
QUESTION 9/VRAAG 9



| | Solution/Oplissing | Marks/ Punte |
|-------|--------------------|-----------------|
| 9.1 | | (5) |
| | | |
| | | |
| | | |
| | | |
| 9.2.1 | | (2) |
| | | |
| | | |
| 9.2.2 | | (3) |
| | | |
| | | |
| | | |
| 9.2.3 | | (2) |
| | | |
| | | |
| | | [12] |

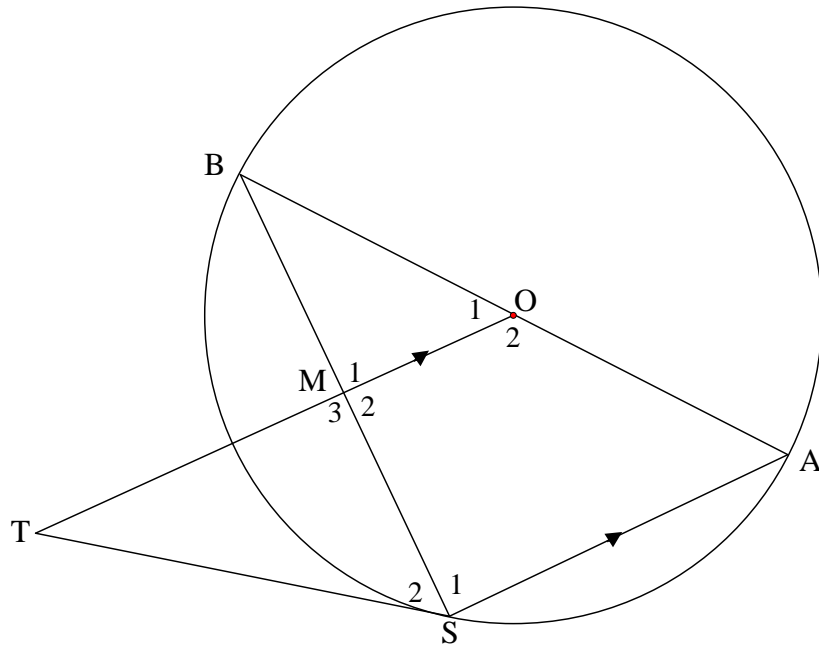
QUESTION 10/VRAAG 10

10.1



| | Solution/Oplossing | Marks/ Punte |
|------|---------------------------|-------------------------|
| 10.1 | | (6) |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

10.2



| | Solution/Oplossing | Marks/ Punte |
|--------|---------------------------|-------------------------|
| 10.2.1 | | (4) |
| | | |
| | | |
| | | |
| 10.2.2 | | (5) |
| | | |
| | | |
| | | |
| | | |
| 10.2.3 | | (3) |
| | | |
| | | |
| | | |
| | | |
| 10.2.4 | | (3) |
| | | |
| | | |
| | | |
| | | |
| | | [21] |

[illegible]

[illegible]

TOTAL/TOTAAL: 150