Naam van leerling/*Name of learner*:……..

	Junie/*June*
Graad/*Grade* 8	**Punte/*Marks*: 50**
Wiskunde Tweede Vraestel	**Tyd/*Time*: 1uur/*hour***
Mathematics Second Paper	
Eksaminator/*Examinator*: Moderator:	

INSTRUKSIES AAN KANDIDATE
INSTRUCTIONS TO CANDIDATES

1. Hierdie vraestel bestaan uit 6 vrae.
   This question paper consists of 6 questions.
2. Alle vrae moet beantwoord word.
   All questions must be answered.
3. Nommer presies soos op die vraestel
   Number the answers exactly as on the paper
4. Trek ‘n lyn na elke vraag en laat ‘n spasie na elke nommer.
   Draw a line at the end of each question and leave a space between each number.
5. Sakrekenaar mag gebruik word.
   Calculators may be used.
6. Wys al jou bewerkings en dit is tot jou voordeel om netjies te werk
   Show all your calculations and it is in your own interest to work neatly.
7. Sketse is nie volgens skaal geteken nie en moenie oorgeteken word nie
   Sketches are not to scale and you don’t have to draw them

VRAAG/*QUESTION* 1

1.1 Voltooi die volgende meetkundige stellings / *complete the following geometrical statements:*

1.1.1 Die supplement van 70º is.....
The supplement of 70º *is ……* (1)

1.1.2 ‘n Driehoek met twee gelyke sye word ‘n …….genoem.
A triangle with two equal sides is called …… (1)

1.1.3 In ‘n reghoekige gelykbenige driehoek is die grootte van die hoeke …….º, ……º en ……..º
In a right-angled isosceles triangle the sizes of the angles are ……..º, …….º and ……..º
(3)

1.1.4 60^o is die …….. van 30^o
60^o is the …….. of 30^o (1)

1.1.5 'n Hoek van 360^o word 'n ……. genoem.
An angle of 360^o is called a …….. (1)

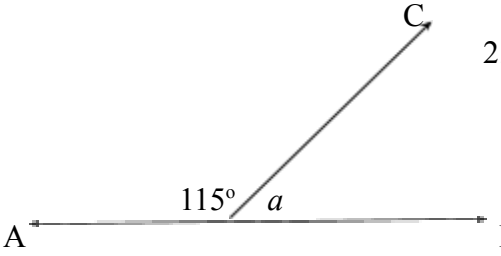
1.2.1 Bereken x as $2x - 10^o$ en $x + 30^o$ twee regoorstaande hoeke is.
Determine x if $2x - 10^o$ and $x + 30^o$ are two vertical opposite angles. (3)

1.2.2 Bereken x as $2x - 10^o$ en $2x + 70^o$ supplementêre hoeke is.
Determine x if $2x - 10^o$ and $2x + 70^o$ are supplementary angles. (3)
[13]

VRAAG 2 / *QUESTION 2*

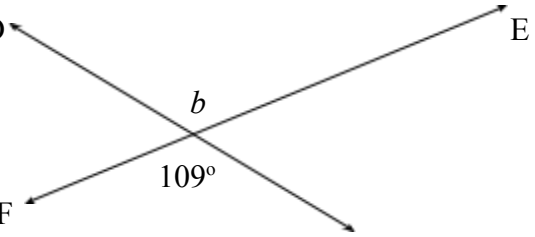
Bepaal die grootte van die onbekende hoeke *a, b, c, d, e* en *f* in die sketse hieronder .
Toon alle berekeninge en gee redes vir jou antwoorde.
In the diagrammes below determine the sizes of the unknown angles a, b, c, d, e and f.
Show all your calculations and give reasons for your answers.

2.1



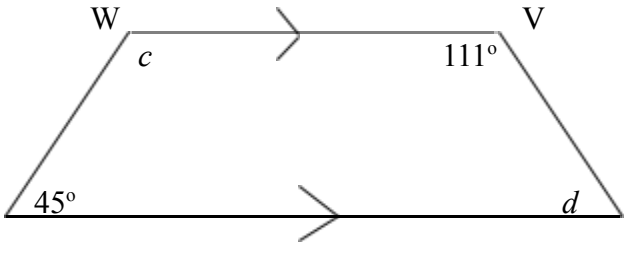
(2)

2.2



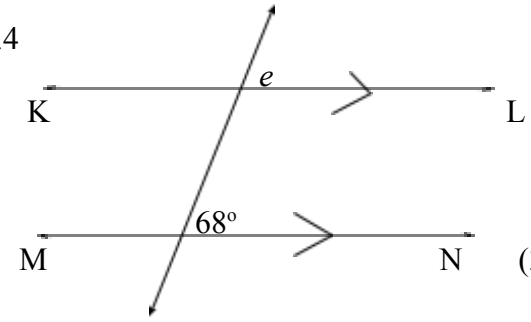
(2)

2.3



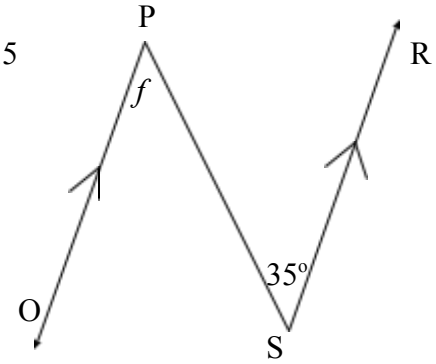
(6)

2.4



(3)

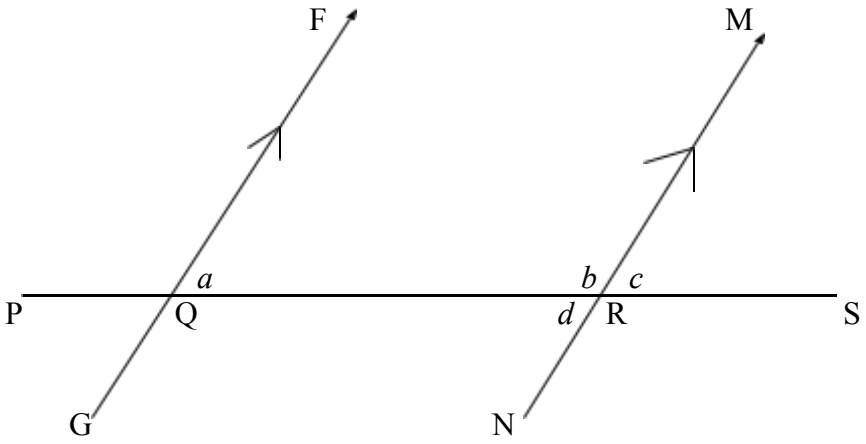
2.5



(3)
[16]

VRAAG 3 / *QUESTION 3*

3.1 In die gegewe figuur is FG // MN en ∠FQS = *a*, ∠PRM = *b*, ∠MRS = *c* en ∠ PRN = *d.* Bereken dievolgende **met redes:**
In the given diagram, FG // MN and ∠FQS = a, ∠PRM = b, ∠MRS = c and ∠ PRN = d. Determine the following ***with reasons***



3.1.1 Indien *a* = 75°, bereken die grootte van *b*
If a = 75°, determine the size of b

3.1.2 Indien *d* = 54°, bereken die grootte van *c*
If d = 54°, determine the size of c

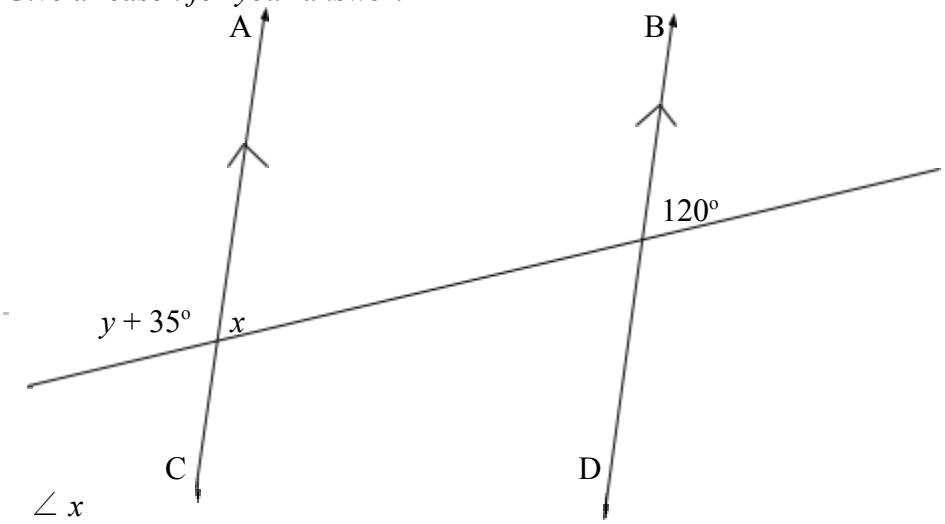
3.1.3 Indien *a* = 82°, bereken die grootte van *c*
If a = 82°, determine the size of c

3.1.4 Indien *d* = 63°, bereken die grootte van *a*
If d = 63°, determine the size of a

3.1.5 Indien *b* = 133°, bereken die grootte van *d*
If b = 133°, determine the size of d (10)

3.2 Bepaal, deur die volgende skets te gebruik, die groottes van die hoeke

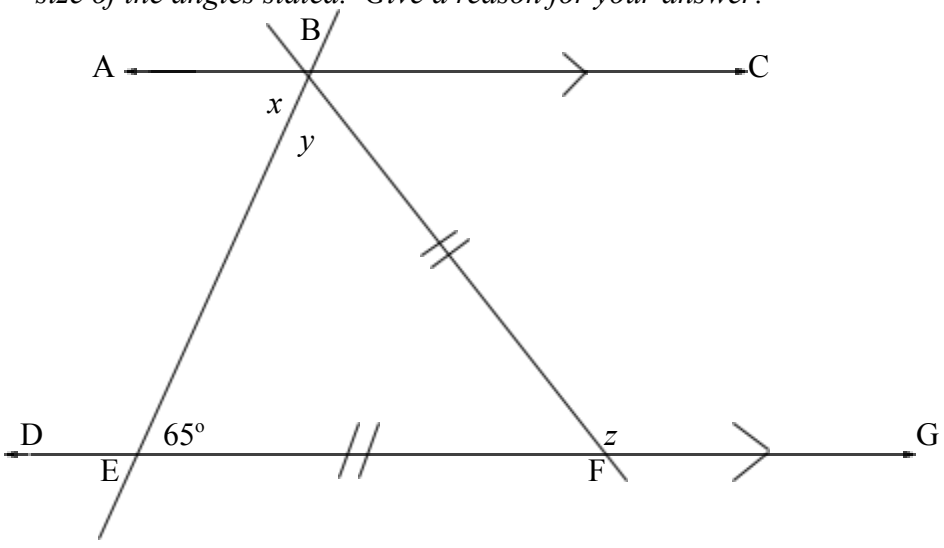
hieronder. Gee ook ‘n rede vir jou antwoord
By using the following sketch, determine the size of the angles stated. Give a reason for your answer:



3.2.1 $\angle x$
3.2.2 $\angle y$

(5)

3.3 Bepaal, deur die volgende skets te gebruik, die groottes van die hoeke hieronder. Gee ook ‘n rede vir jou antwoord:/ *By using the following sketch, determine the size of the angles stated. Give a reason for your answer:*



3.3.1 $\angle x$
3.3.2 $\angle y$
3.3.3 $\angle z$

(6)
[21]

TOTAAL: 50