



GAUTENG PROVINCE
EDUCATION
REPUBLIC OF SOUTH AFRICA

**GAUTENG DEPARTMENT OF EDUCATION
PROVINCIAL EXAMINATION
JUNE 2019
GRADE 6**

MATHEMATICS

DISTRICT _____

SCHOOL NAME _____

NAME AND SURNAME _____

CLASS (E.G. 6A) _____

TIME: 1½ hours

MARKS: 75

15 pages

**GAUTENG DEPARTMENT OF EDUCATION
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MATHEMATICS

TIME: 1½ hours

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INSTRUCTIONS

1. Read ALL the instructions carefully.
2. Question 1 consists of 20 multiple-choice questions. Circle the letter of the correct answer.
3. Answer questions 2 to 15 in the spaces or frames provided.
4. All calculations must be shown on the question paper and may not be done on separate rough paper.
5. Write neatly and legibly.
6. The use of a calculator is NOT allowed.

Question	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Topic	Multiple choice	Written calculations	Shapes	Symmetry	Flow Diagram	Geometric Patterns	Time	Time zones	Conversions	Capacity	Interpret Pie chart	Draw a bar graph	Rate	P/S – Financial Context	Problem Solving
Possible Mark	20	21	8	2	3	3	3	2	2	2	2	2	2	2	1
Learner Mark															

1 Circle the letter of the correct answer.

1.1 What is the value of the underlined digit in 23 880 307?

A 8

B 800 000

C 8 000

D 80 000

(1)

1.2 Which number is 200 000 more than 547 893?

A 567 893

B 547 895

C 747 893

D 569 893

(1)

1.3 Which number sentence has the lowest value?

A $2 \times 5 + 1 \times 3 + 0$

B $2 + 5 \times 1 + 3 \times 0$

C $2 + 5 + 1 + 3 + 0$

D $2 \times 5 \times 1 \times 3 \times 0$

(1)

1.4 Using each of the following digits once, what is the smallest 5-digit number you can make?

3 ; 2 ; 9 ; 7 ; 0

A 32 970

B 23 970

C 2 379

D 20 379

(1)

1.5 Which of the following numbers would be 2nd if they were arranged from smallest to largest?

90 009, 99 009, 90 909, 90 090, 9 000

A 90 009

B 99 009

C 90 909

D 90 090

(1)

1.6 What is 478 598 rounded off to the nearest 1 000?

- A 479 000
- B 478 000
- C 479 500
- D 500 000

(1)

1.7 What are the 1st 5 prime numbers?

- A 1 ; 2 ; 3 ; 5 ; 7
- B 2 ; 3 ; 5 ; 7 ; 9
- C 2 ; 3 ; 5 ; 7 ; 11
- D 3 ; 5 ; 7 ; 11 ; 13

(1)

1.8 What are all the factors of 30?

- A 1 ; 2 ; 10 ; 30
- B 1 ; 2 ; 3 ; 5 ; 6 ; 10 ; 15 ; 30
- C 1 ; 2 ; 3 ; 5 ; 6 ; 10 ; 15
- D 30 ; 60 ; 90 ; 120

(1)

1.9 Which of the numbers listed below are multiples of 3 and 4?

1 ; 2 ; 3 ; 4 ; 6 ; 8 ; 9 ; 12 ; 15 ; 16 ; 18 ; 20 ; 21 ; 24

- A 12 ; 24
- B 1 ; 2 ; 4
- C 4 ; 8 ; 12 ; 16 ; 20 ; 24
- D 12

(1)

1.10 Which fraction has the highest value?

- A $\frac{7}{10}$
- B $\frac{2}{5}$
- C $\frac{1}{2}$
- D $\frac{4}{5}$

(1)

1.11 Which option shows a fraction, decimal and percentage that are all equivalent?

A $\frac{5}{10}$; 0,5 ; 5%

B $\frac{1}{2}$; 0,5 ; 50%

C $\frac{1}{2}$; 1,2 ; 12%

D $\frac{1}{2}$; 0,5 ; 5%

(1)

1.12 What is the next number in this sequence?

0,3 ; 0,5 ; 0,7 ; 0,9 ;

A 0,11

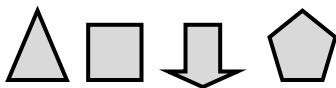
B 1,11

C 1,1

D 1,01

(1)

1.13 If this pattern is repeated, what will the 23rd shape in the sequence be?



(1)

1.14 Which number sentence could be used to solve the following word problem?
Mike has a 2 litre bottle filled with water. He drinks 2 cups of water per day, each cup is 250 millilitres. How many days will it take for him to finish the bottle of water?

A $2 \div 250 = \square$

B $2 \div (2 \times 250) = \square$

C $250 \times 8 = \square$

D $2\ 000 \div (2 \times 250) = \square$

(1)

1.15 The capacity of the bucket in the illustration below is approximately:

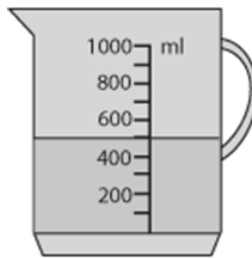
- A 10 litres
- B 100 litres
- C 100 millilitres
- D 10 kilolitres



(1)

1.16 How much liquid is in the jug shown below?

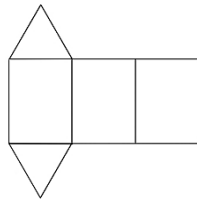
- A 450 ml
- B 500 ml
- C 0,45 ml
- D 550 ml



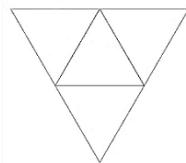
(1)

1.17 Which net can be folded to make a tetrahedron?

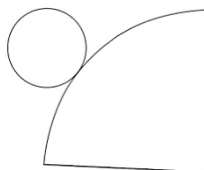
A



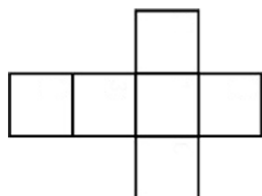
B



C






D




(1)

P.T.O.

1.18 The pictograph below shows the number of songs that Ayanda downloaded over 3 days. In total, she downloaded 30 songs. Which option shows the correct key for this pictograph?

Day	Number of songs downloaded
Thursday	
Friday	
Saturday	

A  = 1 song

B  = 10 songs

C  = 5 songs

D  = 2 songs

(1)

1.19 What is the mode of this set of data?

19 ; 18 ; 20 ; 18 ; 20 ; 19 ; 19 ; 18 ; 13 ; 19

A 19

B 18

C 20

D 13

(1)

1.20 What is the median of this set of data?

34 ; 60 ; 19 ; 18 ; 21 ; 35 ; 18 ; 55 ; 29

A 60

B 18

C 21

D 29

(1)

[20]

2 Calculate the answers for questions 2.1 - 2.10. Use any method. Show your steps.

2.1 $395\,206 + 213\,671$

(2)

2.2 $666\,888 - 438\,207$

(2)

2.3 $6\,402 \times 52$

(3)

2.4 $6\,500 \div 32$

(3)

2.5 $2\frac{2}{17} + 6\frac{9}{17}$

(2)

2.6 $\frac{22}{27} - \frac{7}{9}$

(2)

2.7 Find $\frac{2}{3}$ of 18

(2)

2.8 $35,09 + 0,7$

(2)

2.9 $2,5 \times 100$

(1)


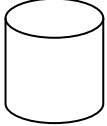
2.10 $54 - 36 \div 9$

(2)

[21]

3 Answer the following questions related to space and shape:

3.1. Complete the table by identifying the shapes shown and the one described.

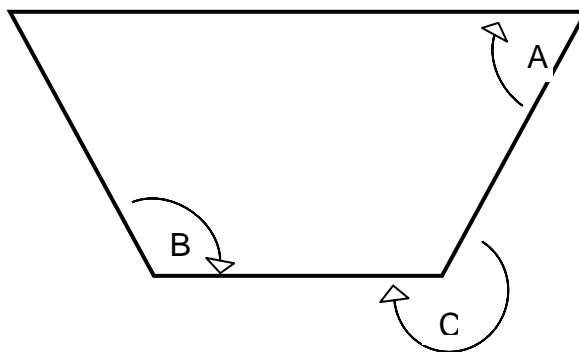
		An object with 5 vertices and 8 edges.

(3)

3.2. How many more faces does a pentagonal prism have, than a triangular prism?

(2)

3.3 Identify the type of angles at A, B and C in the following diagram:



(3)

A: _____

B: _____

C: _____

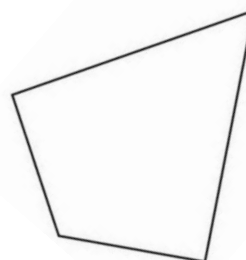
[8]

4 Draw the line or lines of symmetry for these shapes:

4.1

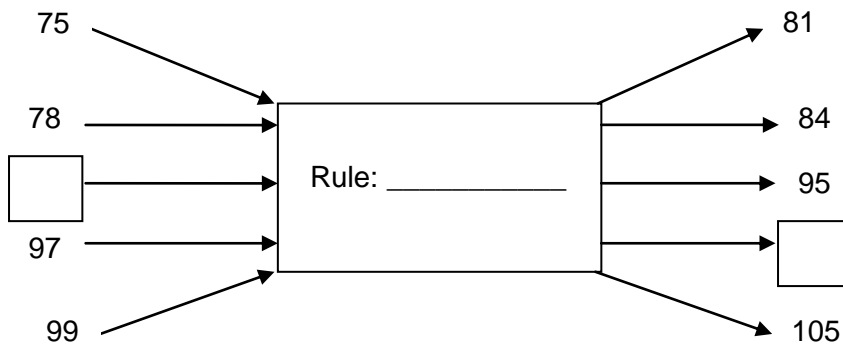


4.2



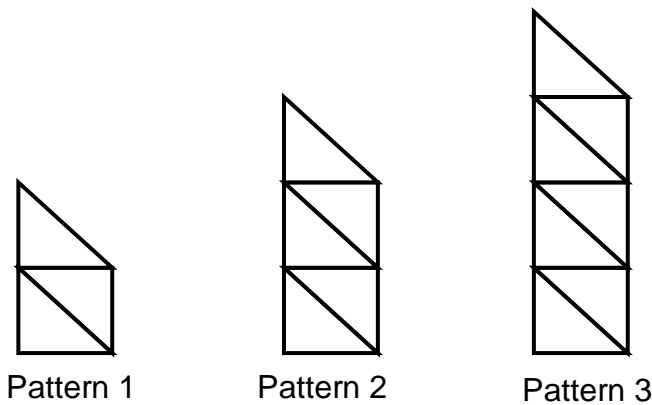
[2]

5 Fill in the rule and missing input and output values for the following flow diagram:



[3]

6 Complete the table based on the pattern below:



Pattern number	1	2	3	4	12	
Number of triangles	3	5	7			59

[3]

7 Sumayah started doing her homework at 6:42 p.m. and finished her homework at 8:03 p.m.

7.1 Write the time that she started her homework in 24 hour digital time.

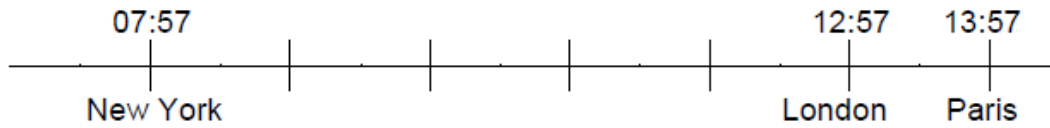
(1)

7.2 How much time did Sumayah spend on her homework?

(2)

[3]

- 8 At a particular moment, times are noted in cities around the world. Use the timeline to answer the questions that follow.



- 8.1 What will the time be in New York, when it is 15:20 in Paris?

(1)

- 8.2 What will the time be in Paris, when it is 15:10 in London?

(1)

[2]

- 9 Convert the following measurements:

9.1 3 650 millilitres = _____ litres

(1)

9.2 8 weeks = _____ days

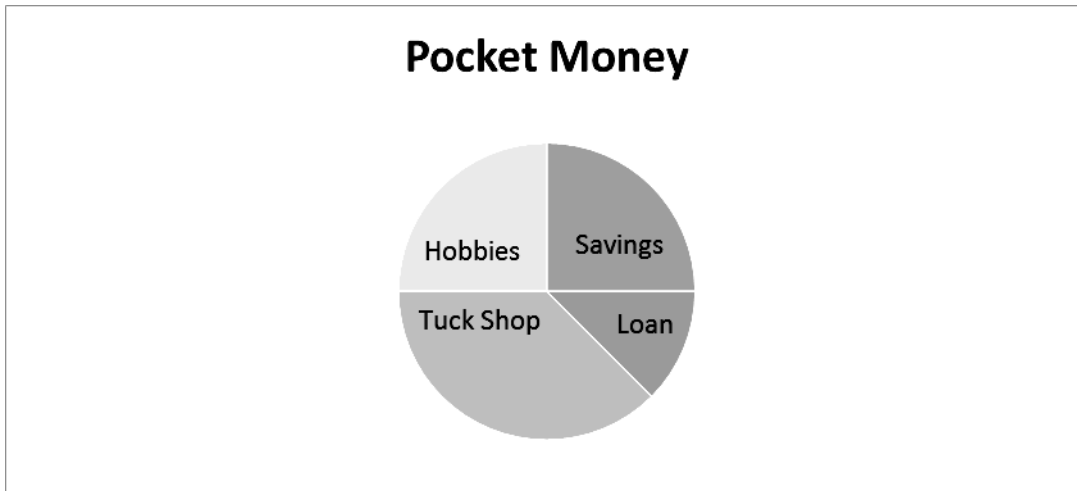
(1)

[2]

- 10 Hamsa has 2,5 litres of cold drink and drinks 1 300 millilitres during the day. How much cold drink does she have left?

[2]

- 11 The pie chart below shows how Mzumeli spends his pocket money. Answer the questions that follow.



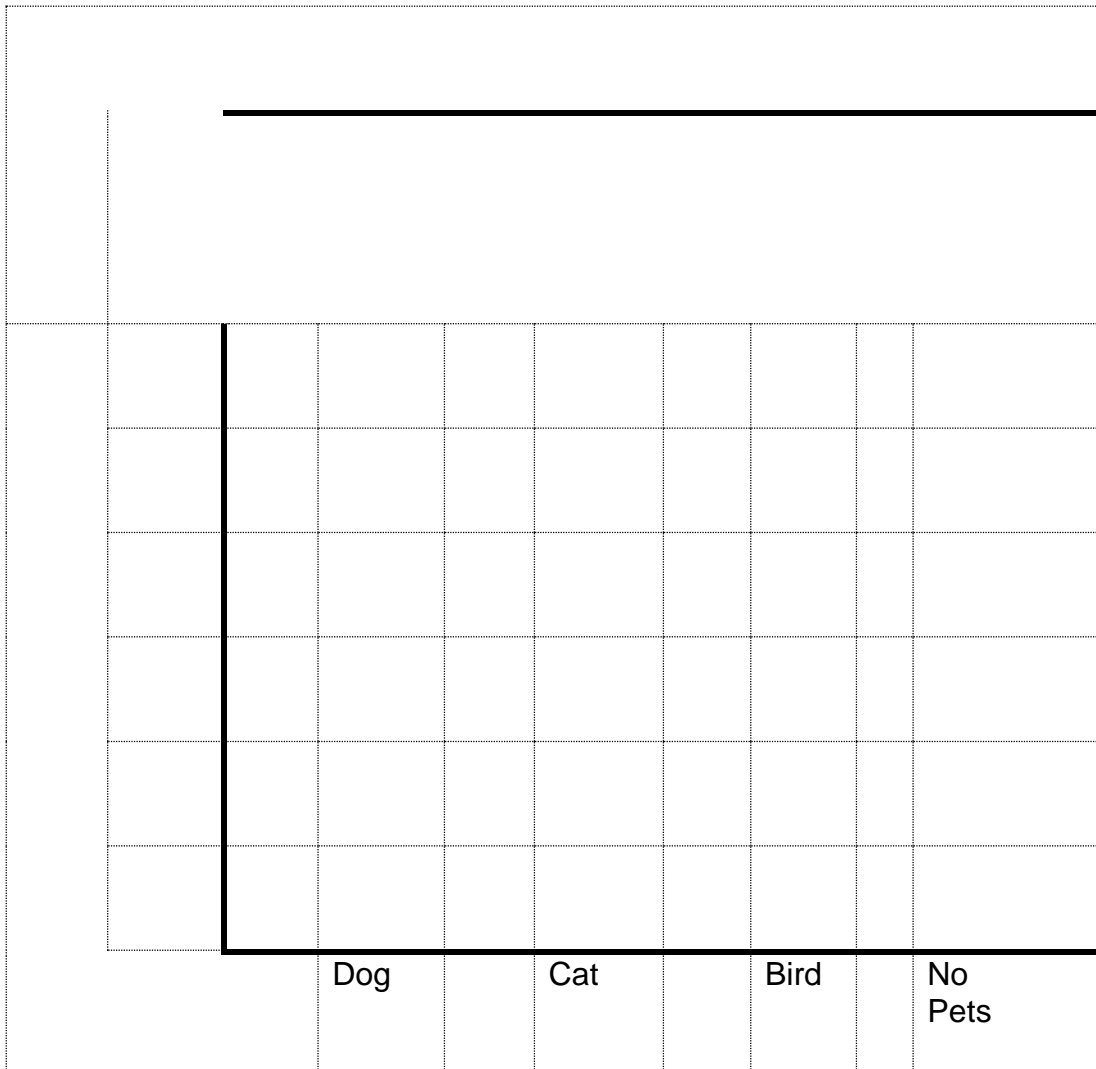
11.1 Where does Mzumeli spend most of his pocket money? (1)

11.2 If Mzumeli gets R60 pocket money a month, how much of that does he save? (1)

_____ [2]

- 12 Nonto asked the learners in her class what kind of pet they had at home, she recorded the results in this tally table. Use the tally table to represent this data in the form of a bar graph.

Type of pet	Learners who own that type of pet
Dog	
Cat	
Bird	
Don't own any pets	

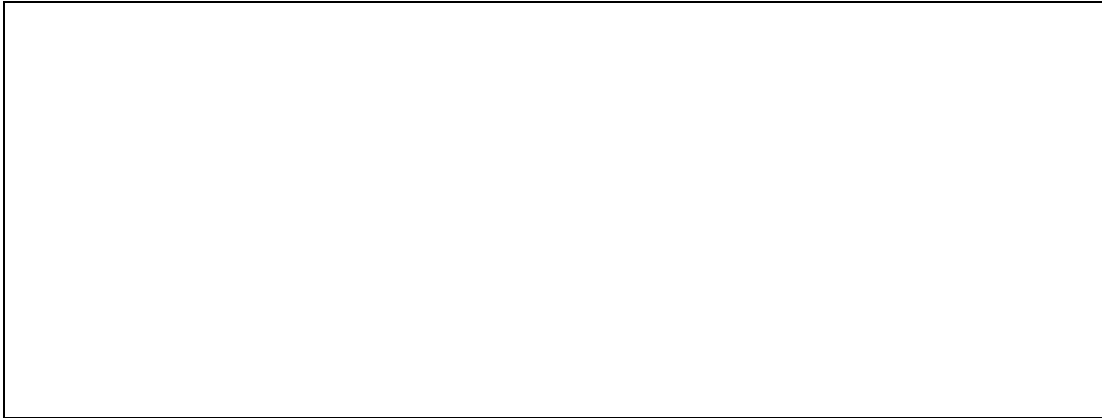


[2]

- 13 A car travels at a speed of 105 km per hour. How far will it travel in 5 hours if it travels more or less the same speed all the time?

[2]

- 14 Siphon buys a textbook from a bookstore at R87,50 and sells it for R100,00. What profit will he make after the sale?



[2]

- 15 What fraction is exactly halfway between a third and a fifth?



[1]

TOTAL: 75**END**