Education

KwaZulu-Natal Department of Education
REPUBLIC OF SOUTH AFRICA

MATHEMATICAL LITERACY P1

COMMON TEST

JUNE 2017

NATIONAL SENIOR CERTIFICATE

GRADE 10

MARKS: 50

TIME: 1 hour

This question paper consists of 7 pages.

INSTRUCTIONS AND INFORMATION

1. This question paper consists of **FOUR** questions. Answer ALL the questions.
2. Number the answers correctly according to the numbering system used in this question paper.
3. Start EACH question on a NEW page.
4. You may use an approved calculator (non-programmable and non-graphical), unless stated otherwise.
5. Show ALL the calculations clearly.
6. Round ALL the final answers off appropriately according to the given context, unless stated otherwise.
7. Indicate units of measurement, where applicable.
8. Write neatly and legibly.

QUESTION 1

1.1 A restaurant pays a waiter R18 per hour. In one week he worked 5 shifts from 12h00 to 23h00.

1.1.1 Calculate the number of hours the waiter works per shift. (2)

1.1.2 Determine his total wage for the week. (3)

1.2 A box of smarties contains 6 red, 4 yellow; 3 white; 7 blue and 5 green smarties only.

If a smartie is selected at random, determine the probability that the colour of the smartie will be:

1.2.1 black (2)

1.2.2 white (2)
[9]

QUESTION 2

2.1 Lucas and Lindiwe are a married couple who prepared this budget. TABLE 1 below shows their budget for February 2017.

TABLE 1: Lucas and Lindidwe's Budget

	Lucas	Lindiwe
Income(salary)	**R16 470,00**	**R 12 550,00**
Expenditure		
Home loan	R9 879,45	
Car finance & insurance		R5 534,70
Education policy	R 200,00	
Funeral policy	R 245,00	
Life cover policy	R 650,00	R 500,00
Petrol	R 950,00	
Furniture instalment	R 690,00	
Clothing		R 900,00
Water and electricity	R 990,00	
Food/cleaning material		R3 500,00
School fees	R 780,00	
Entertainment		R 500,00
Cell phone bills	R 300,00	R 200,00
TOTAL	**A**	**R10 684,70**

2.1.1 Calculate **A**, Lucas's total expenses for February. (2)

2.1.2 Determine how much Lindiwe has left over after paying all her expenses. (2)

2.1.3 Calculate the amount that Lindiwe spends on clothing as a percentage of her total income. (2)

2.1.4 In February the cost of petrol was R11,95 per litre.

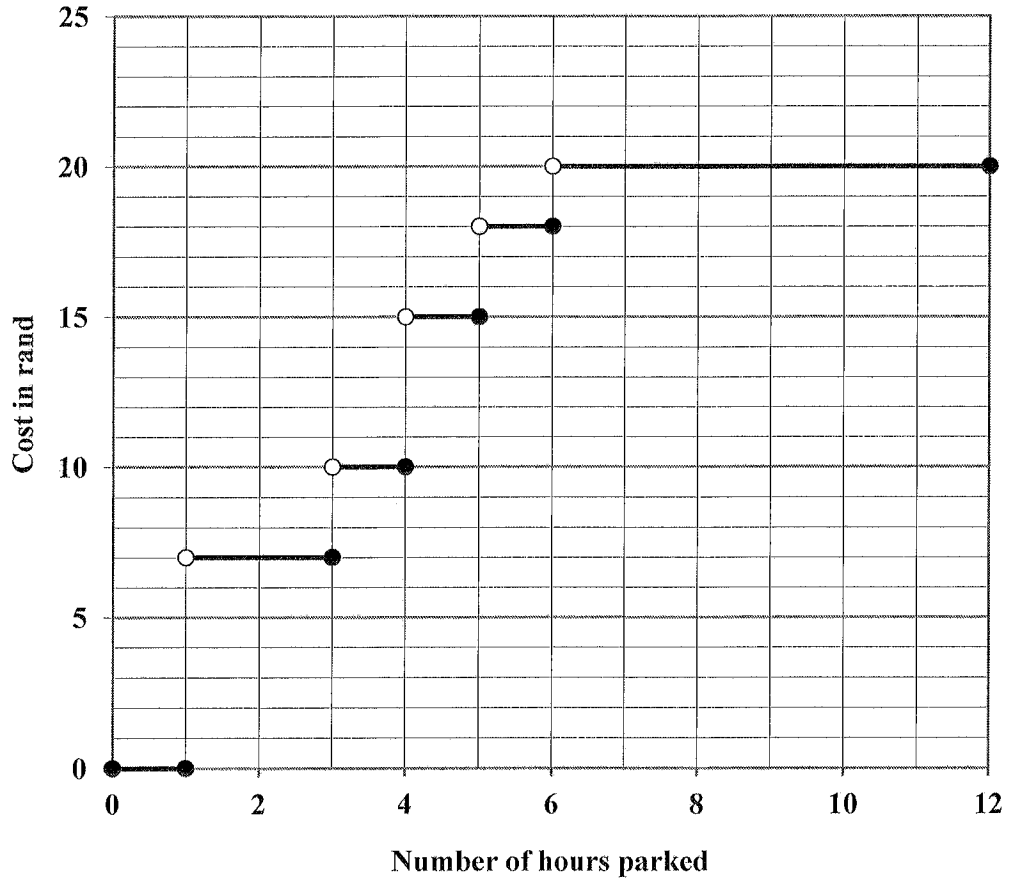
Determine how many litres of petrol Lucas filled in his car. Round your answer off to the nearest litre. (3)

2.1.5 The average fuel consumption of their car is 6,3 litres per 100 km.

Calculate how far (to the nearest 5 km) can they travel with 45 litres of fuel. (3)

2.2 Lindiwe visited a shopping mall to pay her clothing account. She parked in the parking garage.
The graph below shows the cost of parking at a parking garage that is open 12 hours daily.

COST OF PARKING IN THE PARKING GARAGE



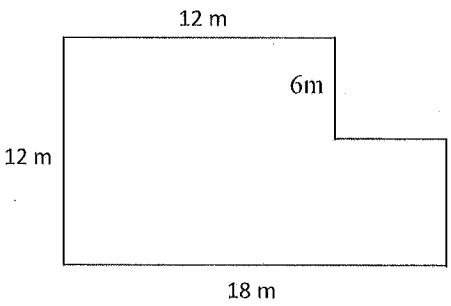
2.2.1 What is the maximum time that you can park at the parking garage for free? (2)

2.2.2 If you paid R10,00 for parking, how long was your car at the parking garage? (2)

2.2.3 How much would you pay if you parked your car at the parking garage for 6 hours 42 minutes? (2)
[18]

QUESTION 3

3.1 The diagram below represents a sketch of a garden.

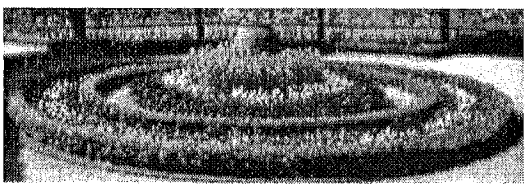


3.1.1 Calculate the perimeter of the garden. (3)

3.1.2 Determine the area of the garden.
You may use the formula:

Area of a rectangle = length × breadth (4)

3.2 A circular flower bed has a radius of 2,5 m.



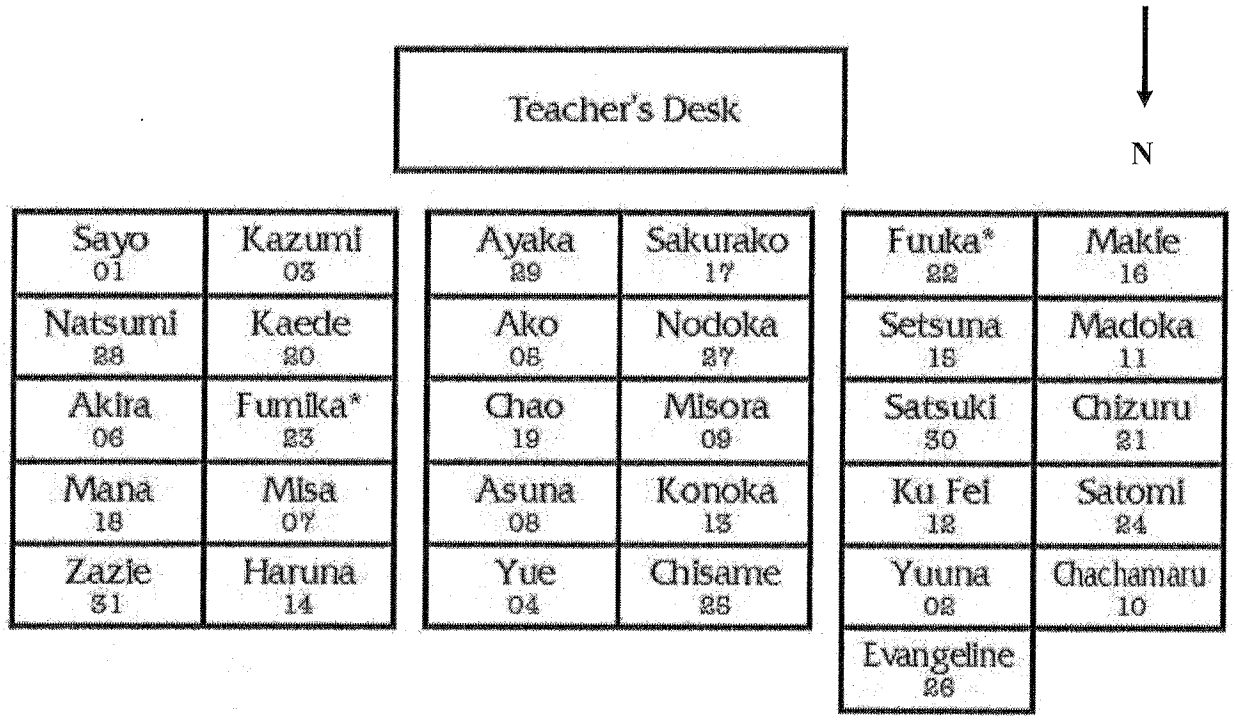
3.2.1 Write down the diameter of the flower bed. (2)

3.2.2 Calculate the circumference of the flower bed.

You may use the formula:
Circumference of circle = 2 × π × radius. Use π = 3,142 (3)
[12]

QUESTION 4

The seating plan of a classroom is given below.



Source: http://en. Wikipedia.org/wiki/file:Negima_seat_Plan.jpg

4.1 Define the term seating plan. (2)

4.2 Madoka is seating in which seat number? (2)

4.3 In which direction is the teacher's desk from Evangeline? (2)

4.4 Which seat numbers are second from the last row and directly opposite the teacher's desk? (2)

4.5 Kaede wants to go to Fuuka to get his calculator.
Describe possible direction he will have to follow without disturbing the lesson. (3)

[11]

TOTAL MARKS: 50