KWAZULU-NATAL PROVINCE
EDUCATION
REPUBLIC OF SOUTH AFRICA

PROVINCIAL STANDARDISED ASSESSMENT

GRADE 11

MATHEMATICAL LITERACY P2

JUNE 2026

Stanmorephysics.com

MARKS: 75

TIME: $1\frac{1}{2}$ hours

This question paper consists of 10 pages.

Copyright Reserved

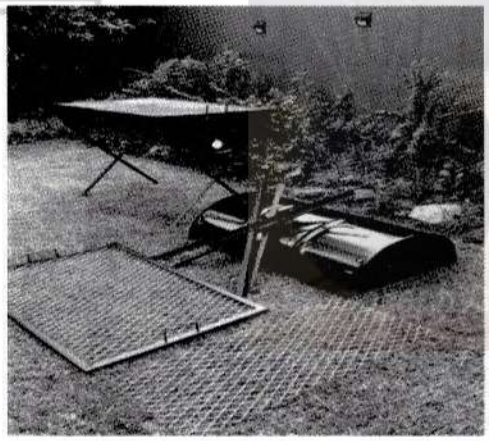
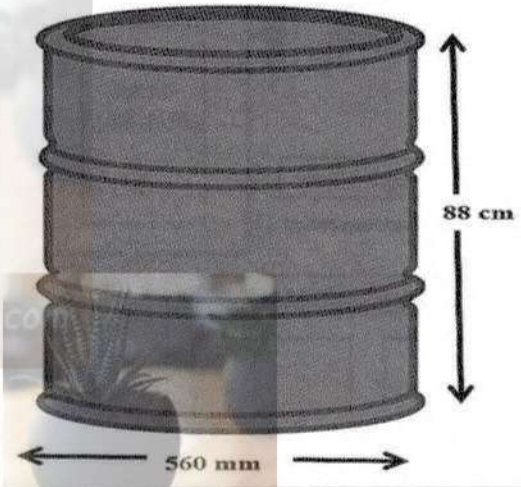
INSTRUCTIONS AND INFORMATION

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 off, ALL the final answers appropriately according to the given context, unless stated otherwise.
7. Indicate units of measurement, where applicable.
8. Diagrams are NOT necessarily drawn to scale unless stated otherwise.
9. Write neatly and legibly.

Stanmorephysics.com

QUESTION 1

1.1 Thabo is a local welder who manufactures braai stands from recycled steel cylindrical drums. He cuts the drum exactly in half lengthwise. Each drum has a diameter of 560 mm and a height of 88 cm.

PICTURE OF THE BRAAI STANDS	DIMENSIONS OF THE CYLINDRICAL DRUM
	

[Source: https://barrelwarmer.com/]

Stanmorephysics.com

Study the information above and answer the questions that follow.

1.1.1 Define the term *diameter* in the given context. (2)

1.1.2 Determine the radius of the drum in millimetres. (2)

1.1.3 Convert the height of the drum to metres (2)

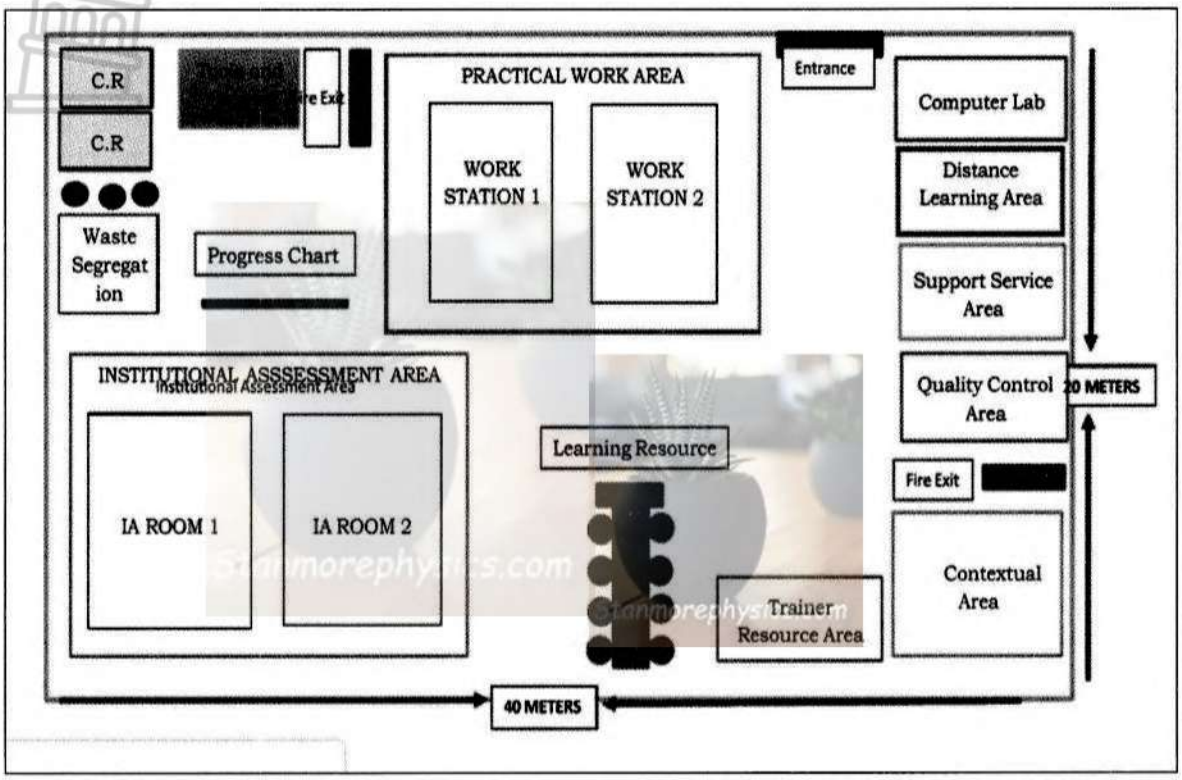
1.1.4 Choose the correct option (**A, B, C** or **D**) that best represents the area of the rectangular top grill

A 49 280 cm^2
B 4 928 mm^2
C 0,4928 m^2
D 1 296 cm^2 (2)

Copyright Reserved

1.2 The layout plan below shows the workshop used by Thabo to train the youth in different welding skills. The workshop has an area of 800 m^2 with a length of 40 metres and a width of 20 metres.

LAYOUT PLAN OF THABO'S WORKSHOP



[Source : https://www.scribe.com]

Use the layout plan above to answer the following questions.

1.2.1 Determine the number of fire exit points shown on the layout plan. (2)

1.2.2 Thabo walks straight from the entrance without turning to the sides. Identify the room that will be directly in front of him. (2)

1.2.3 The area of one work station is 9% of the area of the workshop. Calculate the area of ONE work station in square metres. (2)

1.2.4 The measured length of the workshop is 5cm. determine the scale of the layout plan in the form of **1cm:...m** (2)

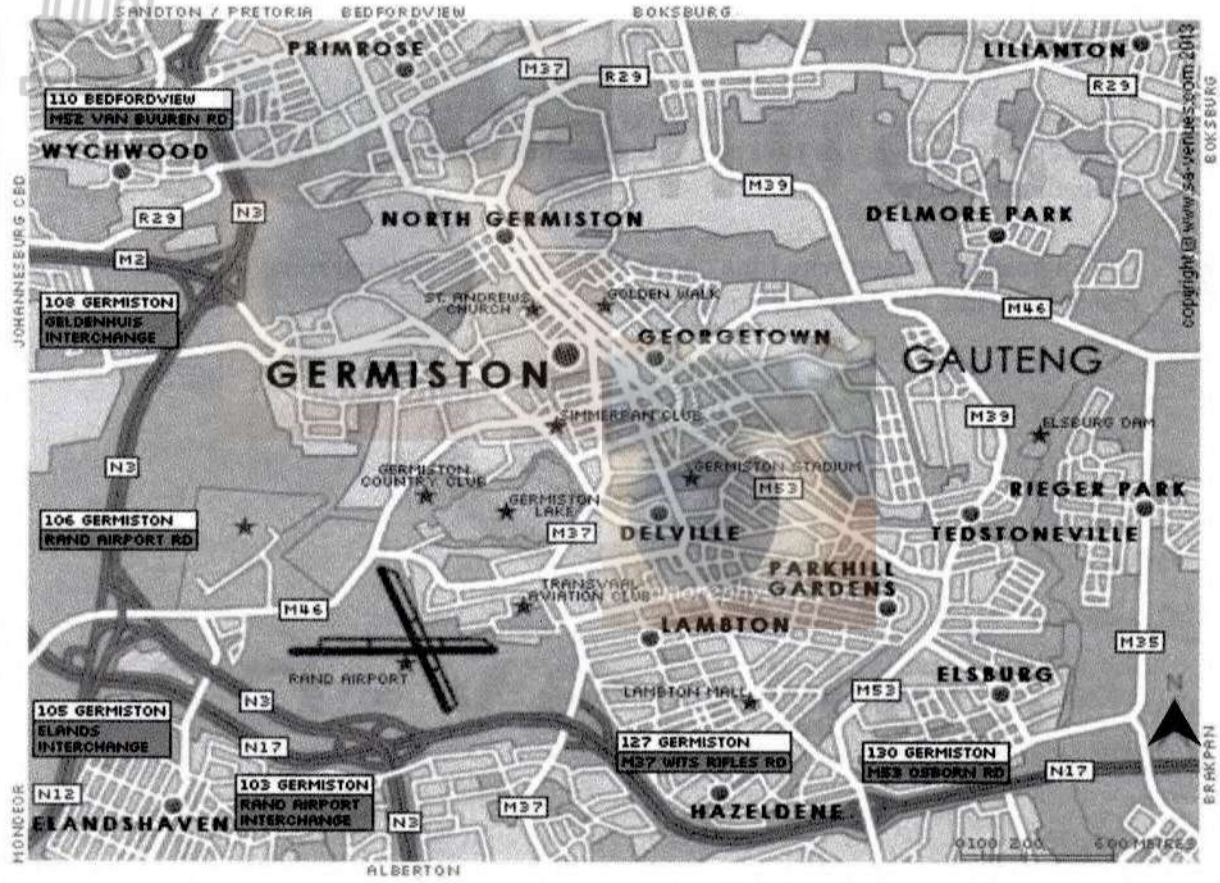
[16]

Copyright Reserved

QUESTION 2

2.1 Lina lives in Germiston and is a delivery driver at Rand Airport. Below is a street map of Germiston and its surroundings.

STREET MAP OF GERMISTON AND SURROUNDINGS



[Source : https://www.sa-venues.com/maps]

Key:

M53 Metropolitan route

N17 National route

Study the street map above and answer the questions that follow.

2.1.1 Identify the national road that runs from north to south on the western side of Germiston. (2)

2.1.2 Give the general direction of Elandshaven from Delmore Park. (2)

2.1.3 Name metropolitan route that is found in Rieger Park. (2)

Copyright Reserved

2.2 Lina drives from Rand airport to Brakpan and her delivery van has a fuel consumption of 9,5 litres per 100 km. The one-way trip takes about 0,6667 hours from Rand Airport to Brakpan using a Metropolitan route.

2.2.1 Calculate the number of litres of fuel she will need for a round trip to Brakpan, if the actual distance from Rand Airport to Brakpan is 24,9 km. (3)

2.2.2 Lina leaves the Rand airport at 08:45 for delivery to Brakpan. She spends 25 minutes offloading the delivery at Brakpan. Calculate her arrival time back at Rand airport after offloading a delivery. (5)

2.2.3 Give a possible reason why Lina chose to drive on the national route for her delivery instead of using the Metropolitan route. (2)

[16]



Copyright Reserved

QUESTION 3

3.1 Yamato uses cylindrical stainless steel and rectangular square-based containers to store milk and olive oil, respectively.

The pictures below show the dimensions of the two containers.

Cylindrical olive oil container	Rectangular square-based milk container
	
Radius (r) = 16cm or 6,29 inches Height (h) = 24,5cm or 9,64 inches **Note:** Volume (imperial) is equal to 1 198,35 inches^3	Length(l) = 238mm Width (w)= 238mm Height (h) = 35cm

[Adapted from https://www.amazon.com/]

Study the pictures and the information above to answer the questions that follow.

3.1.1 Determine the circumference of the base of a cylindrical container in centimetres.

You may use the following formula:
Circumference of the circle = 2 × 3,142 × r, where r = radius (2)

3.1.2 Calculate the volume of the rectangular square-based container in cm^3.

You may use the following formula:
Volume of a rectangular prism = length × width × height (3)

3.1.3 Determine to the nearest litre the capacity of the rectangular container.
Note:1 000 cm^3 = 1 litre (3)

3.1.4 Show by calculations that the conversion factor of the volume of the cylinder is given by 1 inch^3 = 16,44 cm^3.

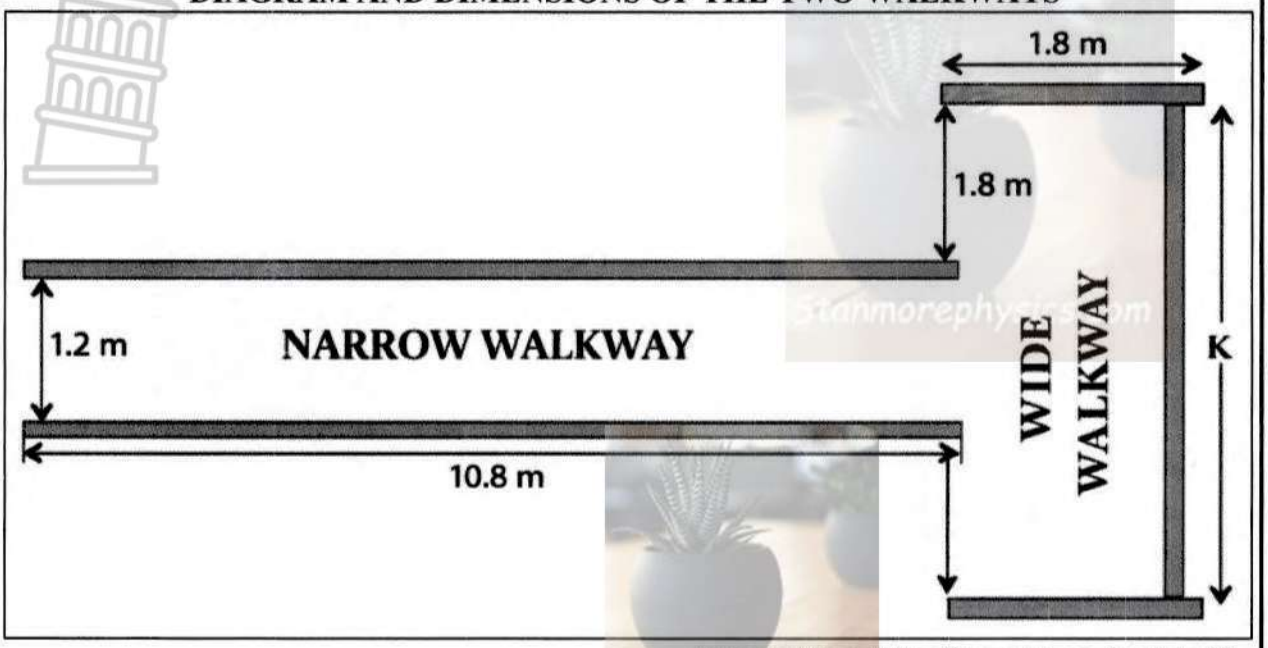
You may use the following formula:
Volume of a cylinder = 3,142 × r^2 × h, where r = radius and h = height. (4)

3.1.5 Yamato intends to coat the outside of the rectangular square base container with a rust-proof spray. Give ONE valid reason of spraying a container with a rust-proof spray. (2)

Copyright Reserved

3.2 Yamato intends to build a walkway that leads to his house. The walkway has a narrow side and a wide side. The walkway design is illustrated below with the diagram and the dimensions of the two walkways shown.

DIAGRAM AND DIMENSIONS OF THE TWO WALKWAYS



[Adapted from https://www.researchgate.net/]

Study the diagram and information above to answer the questions that follow.

3.2.1 Calculate the value of **K**, the length of the wide walkway. (3)

3.2.2 Determine the area of the narrow walkway in square metres.

You may use the following formula: (2)
Area of a rectangle = length × width

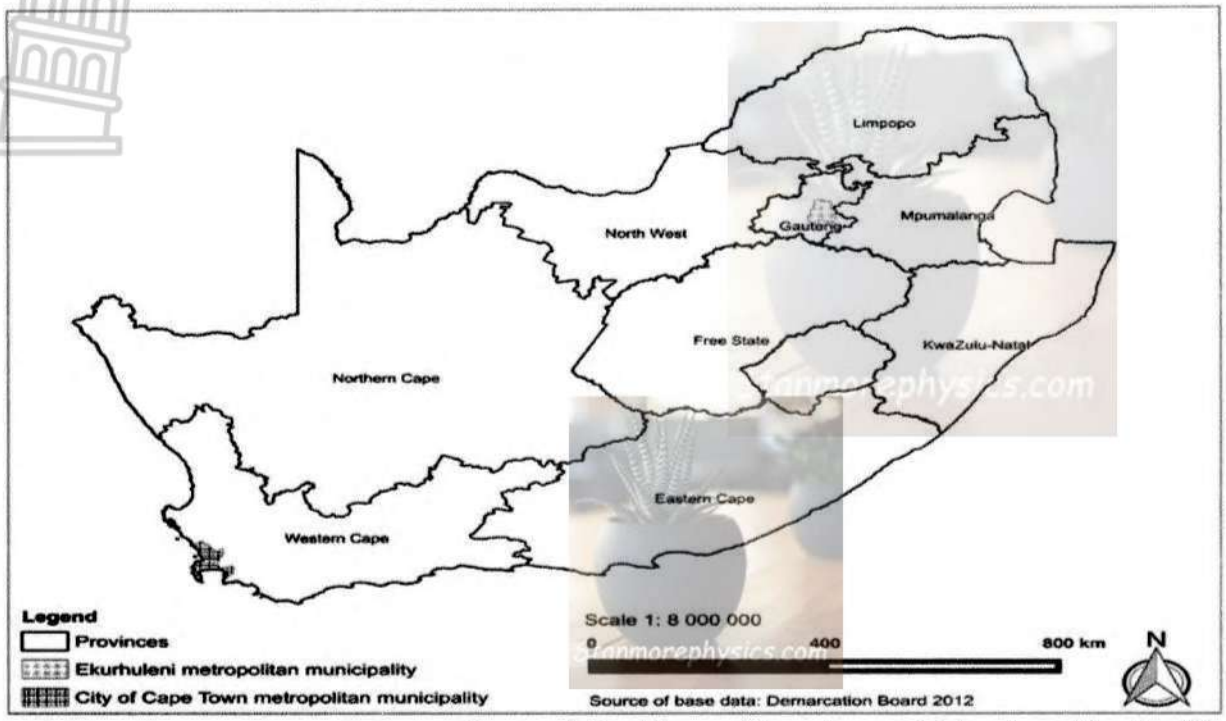
3.2.3 The narrow walkway sides require a recycled-plastic edge to keep the track level. The plastic edging is sold in half-lengths, and each half-length costs R72,50.
Calculate the total cost for buying enough edging for the two side narrow walkway lengths. (5)

[24]

QUESTION 4

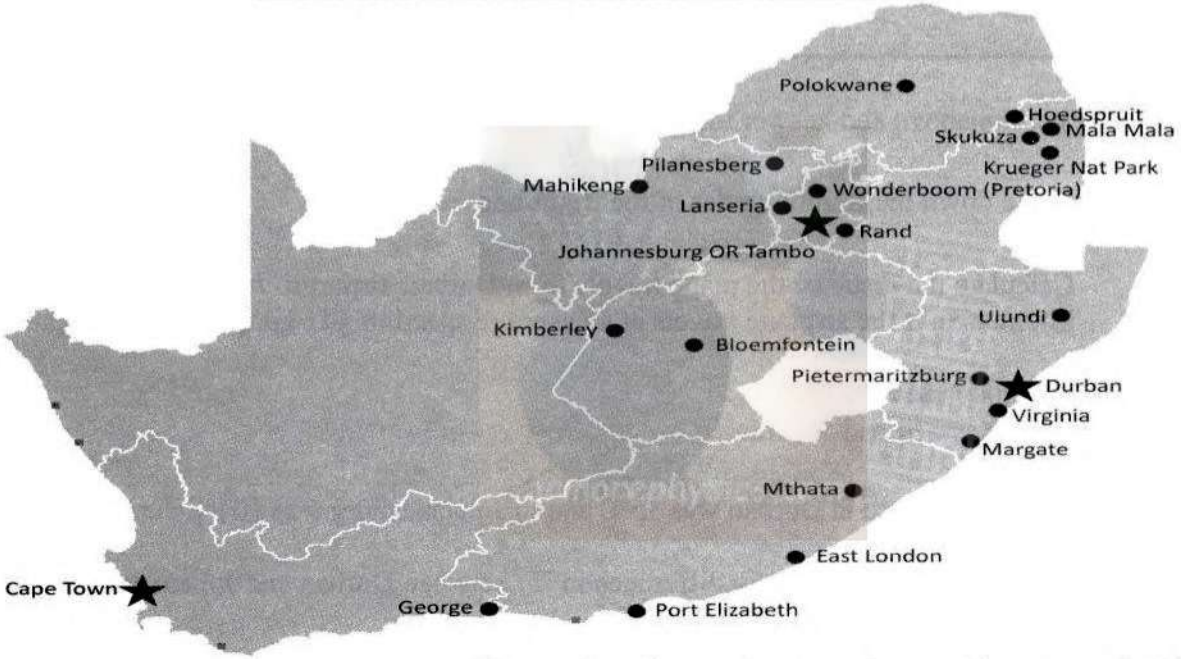
4.1 TWO South African maps with provinces and airports per province are respectively shown below.

MAP 1 OF SOUTH AFRICA SHOWING PROVINCES



[Source: https://www.africansky.com/african-travel/south-africa]

MAP 2 OF SOUTH AFRICA SHOWING AIRPORTS



[Source:https://www.airportspotting.com/airports-south-africa/]

Study the TWO maps above and answer the questions that follow.

4.1.1 Explain the meaning of the number scale given on map 1. (2)

4.1.2 Identify the province that has no airport. (2)

4.1.3 Describe the direction of Johannesburg OR Tambo from Cape Town via Durban airport according to the given context. (3)

4.1.4 Convert the measurement of bar scale into unit ratio. (4)

4.2 Below is the picture showing the flight ticket for a domestic flight from Durban Airport to Johannesburg OR Tambo Airport.

ONE-WAY FLIGHT TICKET FROM DBN TO JHB



[Source: https://www.flysafair.co.za/]

Study the picture above and answer the questions that follow.

4.2.1 Write down the flight number of the flight booked. (2)

4.2.2 Calculate the distance the plane travels from Durban airport to Johannesburg in kilometres, if the airplane travels at an average speed of 441 kilometres per hour.

You may use the formula:
Distance = Speed × Time (3)

4.2.3 The temperature in Durban was 35°C and in Johannesburg was 104°F during the day of the flight.
Determine the temperature difference in °F; between Durban and Johannesburg.
If **86°F = 30°C.** (3)

[19]

TOTAL: 75 MARKS

Copyright Reserved