KWAZULU-NATAL PROVINCE

EDUCATION
REPUBLIC OF SOUTH AFRICA

NATIONAL SENIOR CERTIFICATE

GRADE 10

MATHEMATICAL LITERACY P2

COMMON TEST

JUNE 2023

MARKS: 50

TIME: 1 hour

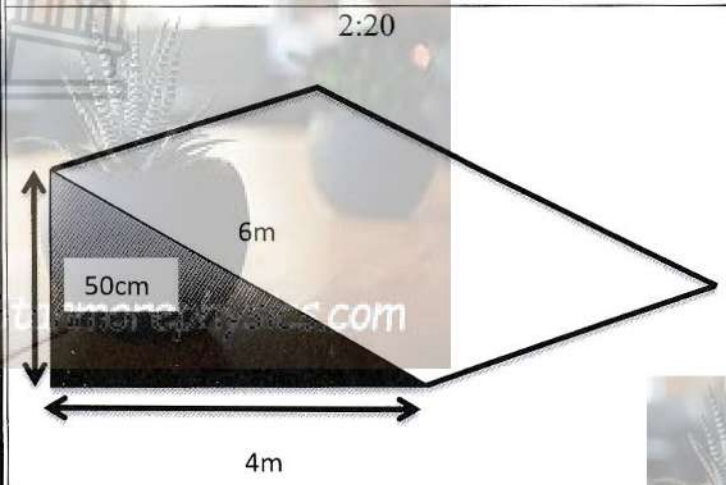
This question paper consists of 6 pages and an addendum with 1 annexure.

INSTRUCTIONS AND INFORMATION

1. This question paper consists of FOUR questions. Answer ALL the questions.
2. Use ANNEXURE A in the addendum for QUESTION 2.
3. Number the answers correctly according to the numbering system used in this question paper.
4. Start EACH question on a NEW page.
5. You may use an approved calculator (non-programmable and non-graphical), unless stated otherwise.
6. Show ALL calculations clearly.
7. Round off ALL final answers to two decimal places.
8. Indicate units of measurement, where applicable.
9. Maps and diagrams are NOT necessarily drawn to scale, unless stated otherwise.
10. Write neatly and legibly.

QUESTION 1

1. Mr Pillai intends building a driveway in their home from the gate to the garage. Below is the picture of a driveway and its dimensions. Mr Pillai has budgeted R7 300 for the driveway.

DIMENSIONS OF THE DRIVEWAY	PICTURE OF THE DRIVEWAY
	

[Adapted from www.bosspaving.co.za]

Use picture and the information above to answer the questions that follow.

1.1 Write down the amount Mr Pillai budgeted in words. (2)

1.2 Give the name of the scale given above and write it in simplest form. (4)

1.3 Convert 50 centimetres to metres. (2)

1.4 Write down the probability of getting a side out of three sides in letter A that has the dimension given in centimetres. (2)

1.5 Determine the dimension that is the longest in shaded diagram. (2)
[12]

QUESTION 2

2. ANNEXURE A shows a map of Kananaskis Country. King Phumuzuzulu High school intends to visit this park. They use this map to decide which places to visit in the park.

Use ANNEXURE A and the information above to answer the questions that follow.

2.1 Determine the type of scale that is given in the map? (2)

2.2 How many parking areas are there on the map? (2)

2.3 Write the scale in a form of:
1cm : .....m (3)

2.4 Give the general direction of the Village Maintenance from the Executive Resort at Kananaskis. (2)

2.5 Use the scale to calculate the actual distance in kilometres from the Village Maintenance to the Executive Resort at Kananaskis if the measured distance is 3,4 cm. (3)

2.6 What is the probability of finding a toilet in the north of the map? Give your answer as a decimal number. (2)

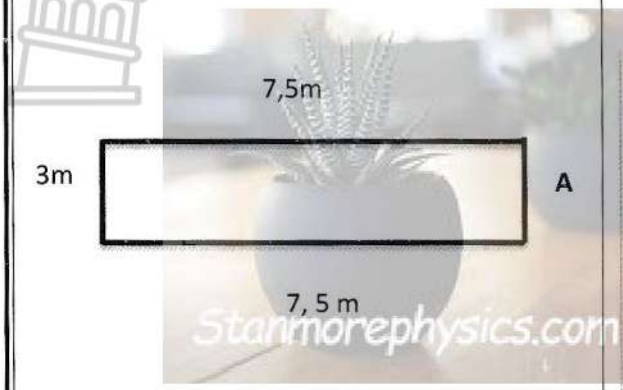
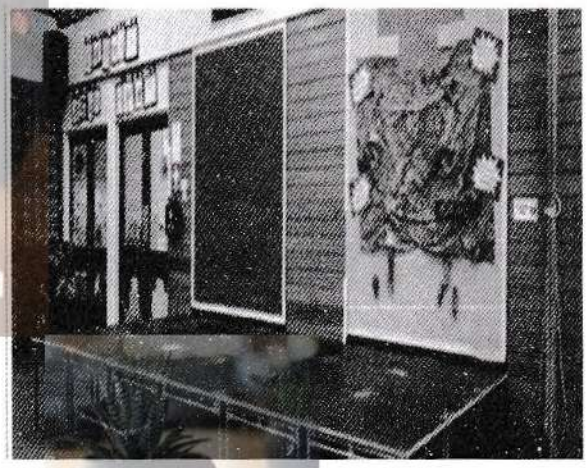
2.7 Give one reason why are the toilets not situated at the centre of the map (2)

[16]

QUESTION 3

3.1

Ikhethelo Secondary school decided to build an artificial stage for the school hall with **A** as a missing length.

DIMENSIONS OF THE STAGE.	PICTURE OF THE STAGE
	

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

Use the information above to answer the questions that follow.

3.1 Convert the 7,5m to cm. (2)

3.2 Find the value of **A**. (2)

3.3 The volume of the stage with materials can be calculated as follows:
Volume = (7,5 m × 3 m × 0,3 m)
= 6,75m^3
State which value in the calculation shown represents the height of the stage? (2)

3.4 Show that the length of the rectangle is 2,5 times the breadth. (4)

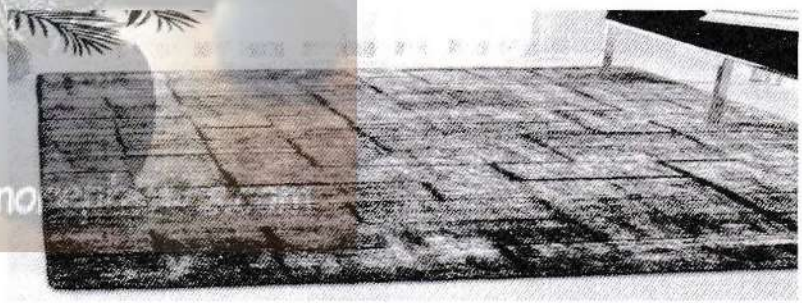
3.5 Give one reason for the school's decision to use an artificial stage instead of a permanent one. (2)
[12]

QUESTION 4

4.

The school decides to carpet the stage in order to prevent injuries. For the stage, 30 m^2 of carpet is needed .Carpet is sold at R60 per m^2. They only need 3 hours and 45 minutes to complete the job. Carpet is packed in piece's that can fit in 36 boxes

Picture of the carpet



[Adapted from:www.karatcarpet.com]

Use the information above to answer the questions that follow.

4.1 Calculate the total cost of the carpet. (2)

4.2 The carpet will be installed on the stage from 7:30 in the morning. Determine the finishing time. (2)

4.3 Write the time calculated in 4, 2 above in 24-hour format. (2)

4.4 One of the learners claims that there are three dozens of boxes that should be used for carpet. Show by calculations if the learner's statement is correct. (4)

[10]

TOTAL: 50

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ADDENDUM

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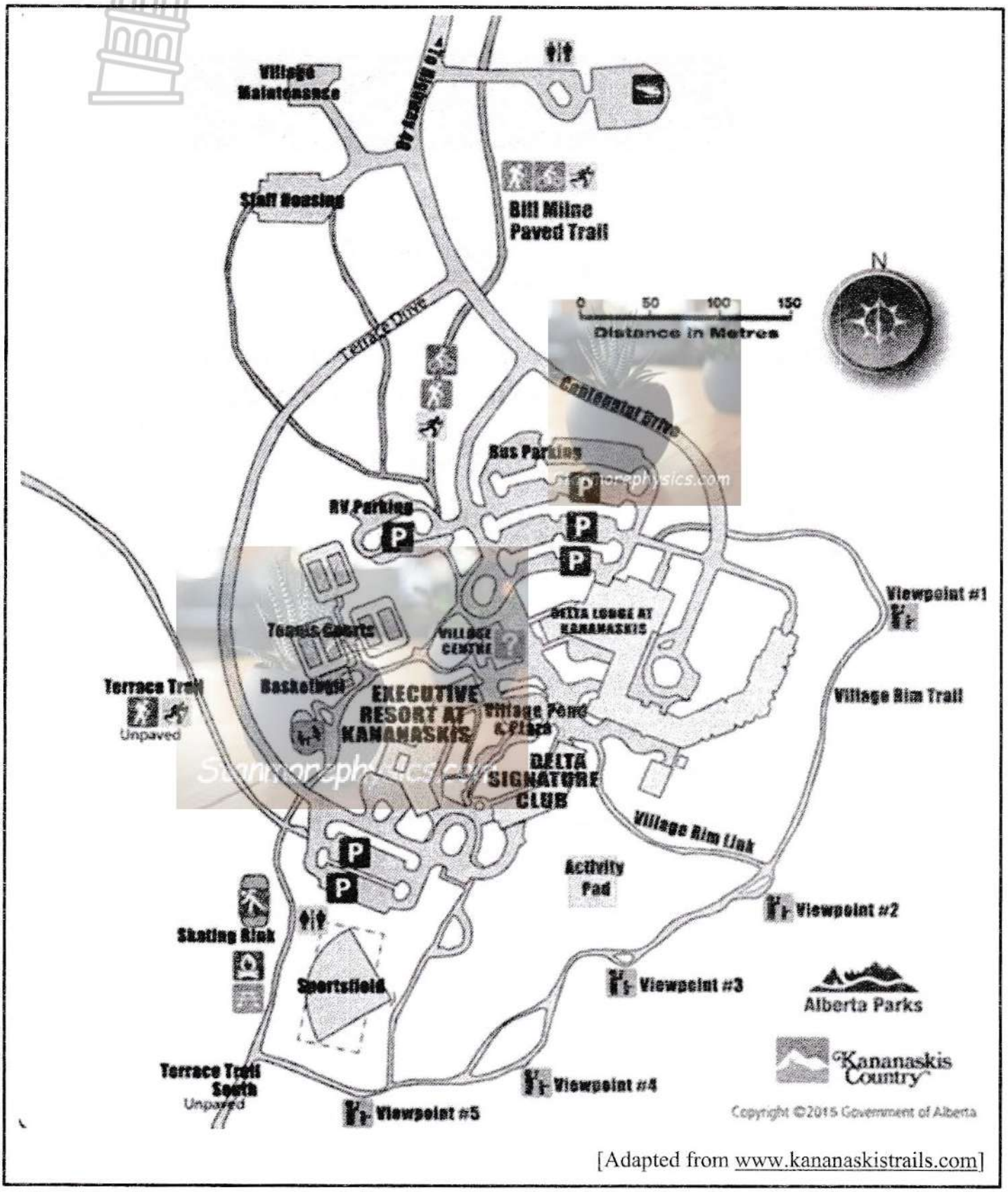
This addendum consists of 2 pages with 1 annexure.

ANNEXURE A

QUESTION 2

MAP OF KANANASKIS COUNTRY



[Adapted from www.kananaskistrails.com]

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MARKING GUIDELINE

MARKS: 50

SYMBOL	EXPLANATION
M	Method
MA	Method with accuracy
CA	Consistent accuracy
A	Accuracy(Answer)
C	Conversion
S	Simplification
RT/RG/RD	Reading from a table/ graph/ diagram
NPR	No penalty for units/rounding
SF	Correct substitution in a formula
O	Opinion/ reason/deduction/example
J	Justification
R	Rounding off/
F	deriving a formula
E	Explanation
U	Units
AO	Answer only full marks

This marking guideline consists of 3 pages.

	QUESTION 1 [12 MARKS] ANSWER ONLY FULL MARKS		
QUE	**SOLUTION**	**EXPLANATION**	**TL**
1.1	Seven thousand three hundred rands✓✓A	2A, Answer (2)	F L1
1.2	Number scale ✓✓A 1:10 ✓✓A	2A, name of the scale 2A, Answer in simplest form (4)	M L1
1.3	$\frac{50}{100}$✓M 0,5 m✓A	1M, dividing by 100 1A, Answer in metres (2)	M L1
1.4	P = $\frac{1}{3}$ **OR** 0,33 **OR** 33,33%✓✓A	2A, Answer (2)	P L1
1.5	6m ✓✓A	2 A, Answer (2)	DH L1
		[12]	

	QUESTION 2 [16 MARKS]		
QUE	**SOLUTION**	**EXPLANATION**	**TL**
2.1	Bar scale ✓✓A	2A, Answer (2)	MP L1
2.2	6 **OR** six✓✓A	2A, answer (2)	MP L1
2.3	4cm : 150 m✓M $\frac{4cm}{4}$: $\frac{150\ m}{4}$ ✓MA 1cm : 37,5 m ✓A	1M, correct measurements 1MA, dividing by 4 both sides 1A, Answer (3) **Accept leeway of 0,2 cm**	MP L3
2. 4	North West **OR** NW ✓✓A	2A, correct answer (2)	MP L2
2.5	✓M Actual distance in km = $\frac{3,4\times37,5}{1000}$ ✓C = 0,1275km ✓A	**CA from 2.3** 1M, multiplying correct values 1C, conversion 1A, answer (3)	MP L3
2.6	P (toilet) = $\frac{1}{2}$ = 0,5 ✓✓A	2A, Answer (2)	P L2

QUE	SOLUTION	EXPLANATION	TL
2.7	Hygiene purposes ✓✓O **OR** Any other valid reason	2O, Reason (2)	MP L4
		[16]	

	QUESTION 3 [12MARKS]		
QUE	**SOLUTION**	**EXPLANATION**	**TL**
3.1	Length = 7,5 m ×100✓C = 750 cm✓A	1C, conversion 1A, Answer (2)	M L2
3.2	**A** = 3m ✓✓A	2A, answer (2)	M L2
3.3	Height = 0,3 m ✓✓A	2A, answer (2)	M L3
3.4	✓RG Length = (2,5 × 3) ✓MA = 7,5m ✓✓A	1RG, reading correct values 1MA, multiplying 2,5 by 3 2A, Answer (4)	M L3
3.5	So that they can remove the stage to open a space if they want to have more space✓✓A **OR** The stage is not used on daily basis✓✓A **OR** Any other valid reason	2A, Answer (2)	M L4
		[12]	

	QUESTION 4 [10 MARKS]		
QUE	**SOLUTION**	**EXPLANATION**	**TL**
4.1	Cost = 30 × 60 ✓M = R1800 ✓A	1M, multiplying correct values 1A, correct answer (2) **AO**	F L2
4.2	Time = 7:30 + 3:45 ✓M = 11:05 am ✓A	1M, adding correct values 1A, Answer (2)	M L2
4.3	23:05 ✓✓CA	**CA from 4.2** 2CA, Answer (2)	M L2
4.4	1 dozen = 12 boxes ✓M $\therefore \frac{36}{12}$ ✓MA = 3 ✓A The statement is correct ✓O	1M, 1dozen = 12 boxes 1MA, dividing correct values 1A, Answer 1O, opinion (4)	M L4
		[10]	
		TOTAL:50	