



<u>FACULTY</u>	: EDUCATION
<u>DEPARTMENT</u>	: CHILDHOOD EDUCATION
<u>CAMPUS</u>	: SWC
<u>MODULE</u>	: MATHEMATICS FOR FOUNDATION PHASE 2B
<u>SEMESTER</u>	: Second
<u>EXAM</u>	: NOVEMBER 2019

<u>DATE</u>	: NOVEMBER 2019	<u>SESSION</u>	: 08:30 - 10:30
<u>ASSESSOR(S)</u>	: PROF K. LUNETA		
<u>MODERATOR</u>	: PROF C. LONG		
<u>DURATION</u>	: 2 HOURS	<u>MARKS</u>	: 100

NUMBER OF PAGES: 5 PAGES

INSTRUCTIONS:

1. Answer ALL THE QUESTIONS.
 2. Number your answers clearly
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QUESTION 1**Define the following terms**

- i. Units of measurement (2)
 - ii. Capacity (2)
 - iii. Geometric reasoning (2)
 - iv. Weight (2)
 - v. Time (2)
 - vi. In measurements what do you understand by the terms standard and none standard units of measurements, provide examples in each case. (2)
 - vii. With the aid of a diagram, name and explain an experiment one would carry out with learners in grade 2 to find volume of an irregular object? (3)
 - viii. Describe 6 Van Hiele Levels of geometrical development that learners go through. (6)
- [21]

QUESTION 2

Define and draw the following angle

- i. Complementary angles (2)
 - ii. Supplementary angles (2)
 - iii. Congruent triangles (2)
- [6]

QUESTION 3

Name the main units used to measure the following attributes in imperial and metric systems.
Draw the table in your answer sheet.

Attribute	Imperial Units	Metric Units
Length		
Mass		
Capacity		

[6]

QUESTION 4

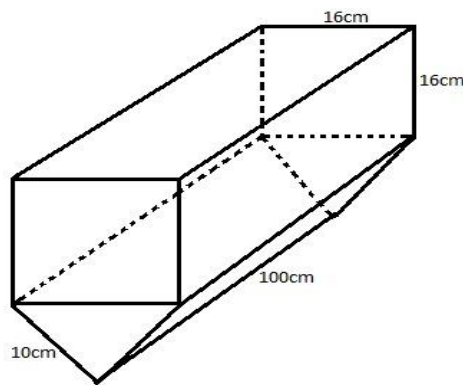
Complete the table below. Draw the table in your answer sheet.

Km	.....cm	.....mm
645289 mm	.....m	.....km
876100 g	.....kg	.....tonnes
4800 minutes	.....hr	.....seconds
1.25 l	.....cm ³	.....m ³

[10]

QUESTION 5

- Draw the net of the polyhedron below (2)
- Find the volume of the polyhedron in litres (8)

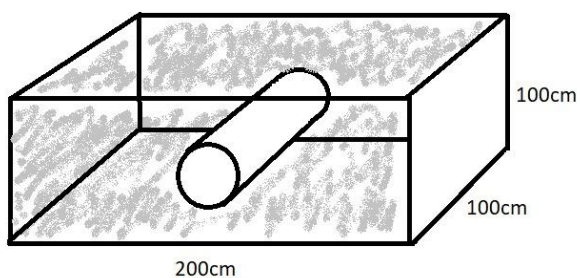


[10]

QUESTION 6

The figure below is that of a solid cuboid with a cylinder of radius 28cm cut out of it.

- Find the volume of the cuboid in litres (4)
- If the cost manufacturing 1 litre of the cuboid is \$ 3.50, how much would it cost in Rands to manufacture 10 blocks if the exchange rate is \$1 = R15.30 (8)



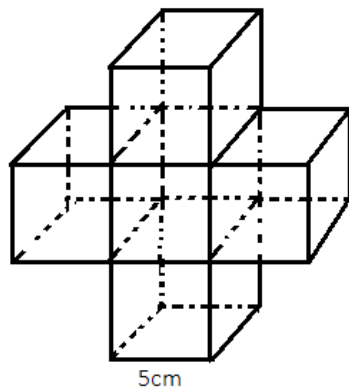
[12]

QUESTION 7

- i. A runner covers a distance of 54 km in 3hr 20 minute what was her average speed?
(3)
 - ii. Find the time in seconds it takes a car travelling at 85km/hr to cover a distance of 255 km.
(3)
- [6]**

QUESTION 8

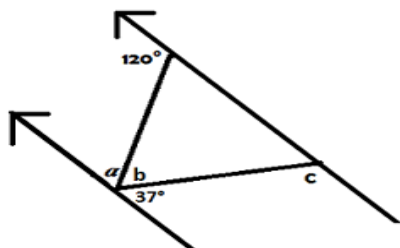
- i. A plane leaves Johannesburg for Perth at 19.30 on Monday, if Johannesburg is 9 hour behind Perth at what time and day does the plane arrive in Perth if the flight was 10.30 hr long and had a 1.30 hr stop in Dubai?
(3)
- ii. If a regular decagonal field is fenced with a 70 000 cm wire mesh, what is the length of each side in metres?
(3)
- iii. A. Explain to the class how many cubes make up the bronze metal cross below.
(1)
- b. If each cube weighs 1500 grams, what is the tonnage of the cross?
(4)
- c. What is the capacity of the cross?
(4)



[15]

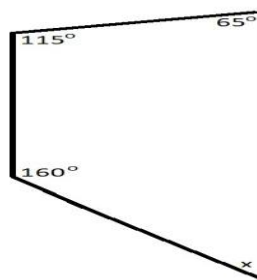
QUESTION 9

10.1 Find the values of **a**, **b**, **c** and **x** in i and ii below



i.

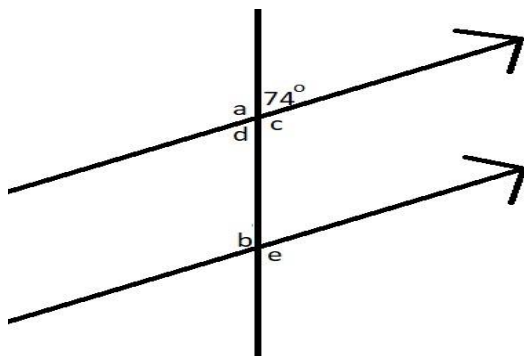
(3)



ii.

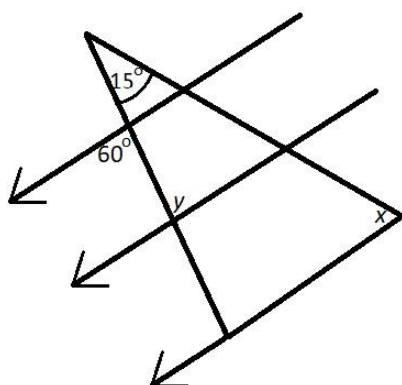
(2)

10.2 Find the values of angles marked: **a**, **b**, **c**, **d** and **e**



(4)

10.3 Find the size of the angles marked **x** and **y** in the diagram below:



(2)

10.4 What is the **sum of the interior angles** of a 20 sided regular shape?

(3)

[14]

TOTAL: 100

END OF EXAMINATION