

# EXAMINATIONS COUNCIL OF ESWATINI Eswatini Primary Certificate

CESWI			
CANDIDATE NAME			
CENTRE NUMBER		CANDIDATE NUMBER	
MATHEMATICS			212/02
PAPER 2		Oc	tober/November 2019
			2 hours
Candidates answer or	the Question Paper		
Additional materials:	Geometrical ins Tracing paper (		

#### READ THESE INSTRUCTIONS FIRST

Write your Centre number, candidate number and name on all work you hand in.

Write in dark blue or black pen.

Answer all questions in this paper.

You may use an HB pencil for any diagrams or graphs.

Do **not** use staples, paperclips, highlighters, and glue or correction fluid.

All working must be shown clearly.

Electronic calculators should **not** be used.

Marks will be given for working which shows that you know how to solve the problem even if you get the wrong answer.

The number of marks is given in brackets [ ] at the end of each question or part question.

The total of the marks for this paper is 100.

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This document consists of 17 printed pages and 3 blank pages.

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1 Yakhe has saved E78 012 to buy a car costing E150 000.

How much more money does she need to buy the car?

*Answer* ......[3]

Work out the following.

(a) 
$$\frac{2}{3} - \frac{2}{5}$$

*Answer* (a).....[3]

**(b)** 
$$\frac{3}{7} \times \frac{1}{3}$$

*Answer* (*b*).....[2]

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<b>3</b> (a) What is 40% of 120 cov
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*Answer* (*a*).....[2]

(b) Sabelo's salary is E12 500 per month. His salary is increased by 30%.

Calculate his new salary per month.

*Answer* (b) .....[4]

4	(a)	Marv	has a	bag	full	of 1	pencils.
-	(44)	1vIdi j	mas a	ug	1 (411	~ I	ociiciis.

When the bag is  $\frac{2}{3}$  full it has 20 pencils.

How many pencils are there in the bag when it is full?

*Answer (a)* ......[3]

(b) Phola takes his medication every 8 hours.
Thuli takes her medication every 4 hours.

Today they both took their medication at 6.00 am.

At what time will they both take their medication at the same time today?

*Answer (b)* ......[3]

5	(a)	Mark $B$ on the line provided below, such that $AB = 5$ cm. <b>Point</b> $A$ has already been marked for you.	[2]
	<b>(b)</b>	Using $AB$ as a radius and $A$ as a centre draw a circle.	[2]
	(c)	Draw angle $BAC = 80^{\circ}$ , with $C$ on the top half of the circumference of the circle.	[2]
	( <b>d</b> )	Draw angle $ABD = 70^{\circ}$ , with $D$ on the top half of the circumference of the circle.	e [2]
	(e)	Join C to D, to form quadrilateral BACD.	[1]
	<b>(f)</b>	Name quadrilateral <i>BACD</i> .	
		Answer (f)	[1]
	<b>(g)</b>	Measure the length of <i>CD</i> .	
		<i>Answer</i> ( <i>g</i> )cm	[1]

6 The following shows the number of units of electricity consumed by each activity in a certain boarding school in the month of June.

Activity	Number of units
ironing	463
cooking	4500
warming water	3000
television	244
refrigerating	1075
charging cell phones	43

Which activity consumed the less number of units?

	Answer (a)[1]
<b>(b)</b>	Calculate the total number of units consumed by cooking, television and refrigerating in the boarding school in June.

*Answer (b)* ......[2]

(a)

<b>(c)</b>	In mid-August the boarding school was closed.
` /	It used $\frac{3}{5}$ of the number of units of electricity for cooking compared
	to June

How many units did the boarding school used for cooking in August?

*Answer* (*c*).....[3]

At the beginning of the year, a farmer bought a certain number of sheep to rear in her farm.

The farmer's sheep increased by 2 times by the end of the year to 3440.

How many sheep did the farmer buy at the beginning of the year?

*Answer*.....[2]

Fig. 8.1 shows a rectangular plot belonging to Mr Buthelezi. The plot measures 60 m by 40 m.

No fencing is needed on one side of the plot because there is a brick wall.

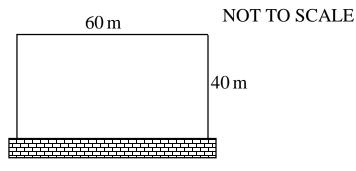


Fig. 8.1

(a) Find the length of fence Mr Buthelezi needs, to fence his plot.

*Answer* (a)...... m [2]

**(b)** The fence costs E99 per metre.

How much does it cost to fence the plot?

*Answer* (*b*) E.....[2]

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9	(a)		left Siteki town at 2.17 pm and drove to Manzini. burney took 100 minutes.  Change 100 minutes into hours and minutes.
		(ii)	Answer (a)(i)hoursminutes [2] At what time did he arrive in Manzini?
			<i>Answer</i> (a)(i)[2]
	(b)	days.	works in the local supermarket during school holidays for 14 lay she works for 5 hours.
		(i)	Calculate the number of hours Ruth works in the 14 days.
			<i>Answer</i> (b)(i)[2]
		(ii)	Ruth is paid E35 per hour in the supermarket.
			Work out the amount she earns in 14 days.

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10 Quick Car Hire charges the following prices per day for renting their vans.

Number of days	1	2	3	4
Cost (E)	E800 + E300	E1600 + E300	E2 400 +E300	E3 200 + 300
Cost (E)	= 1 100	= 1 900	= 2 700	= 3 500

(a)	How much does it cost to rent a van for 6 days at Quick Car Hire?
	Answer (a)[3]
<b>(b)</b>	Mr Dlamini has E9 900. He wants to rent a van at Quick Car Hire services.
	Calculate the number of days he can rent the van for this amount.
	4 (1)
	<i>Answer</i> (b)[3]

(c) Write a rule for calculating the amount paid for renting a van at Quick Car Hire when given the number of days.

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11 (a) Miss Mabuza buys 15 kg of tea at a wholesale. She puts the tea into packets each with 75 g.

(i) Change 15 kg into grams.

*Answer* (a)(i)...... g [2]

(ii) Calculate the number of packets she gets.

*Answer* (a)(ii).....[2]

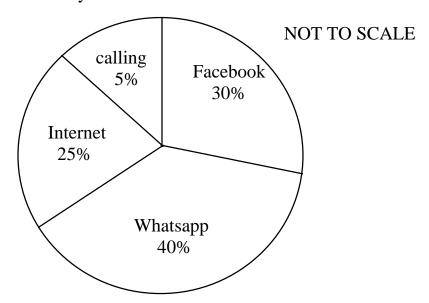
(b) Miss Mabuza sells each packet for E95.How much money does she get from selling all the packets?

*Answer (b)* E.....[2]

(c) Miss Mabuza pays E12 000 for the 15 kg of tea at the wholesale. How much profit does she make from selling all the packets?

*Answer* (*c*) E.....[2]

Paul uses his cell phone for calling, Facebook, Whatsapp and Internet. The pie chart shows the amount of time in percentages, he spends on his cell phone in a day.



(a) How much time in hours does Paul spend on Internet in a day?

*Answer* (a).....[2]

**(b)** Calculate the sector angle for the amount of time Paul spend on Whatsapp.

*Answer* (*b*).....[2]

13	A community held a tree planting campaign to prevent soil erosion.
	On the first day, they planted 22 trees, on the second day 29 trees and 36
	trees on the third day.

(a) If they continued to plant the trees in this pattern, how many trees did the community plant on the fourth day?

*Answer* (a).....[2]

**(b)** Find the total number of trees planted by the community in the first three days.

*Answer* (*b*).....[2]

(c) The community watered each tree using 17.3 litres of water. How much water did they use on the first three days for watering the trees?

*Answer* (*c*)......[3]

A school trip organising committee counted the amount of money paid by the learners for an educational trip.

Before counting the money, the committee sorted the money according to the value of each note.

They found that the money had the following notes.

Value of note	Number of notes	Amount (E)
E10	5	50
E20	8	
E50	6	
E100	13	
E200	7	

(a)	Complete t	the table	above b	y showing	the total	amount o	of each note.
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[4]

**(b)** Find the total amount of money collected by the committee.

*Answer* (*b*).....[2]

(c) 30 learners paid for the trip.

How much did each learner pay for the trip?

*Answer* (*c*).....[2]

Fig. 15.1 shows three line segments AB, MN and PQ. The line segments AB and MN intersects at point O. Angle  $AON = 107^{\circ}$ .

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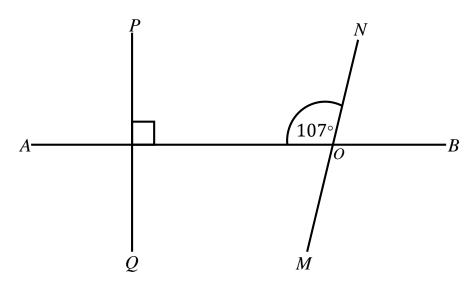


Fig. 15.1

In Fig. 15.1;

(a) Name one horizontal line.

*Answer* (*a*).....[1]

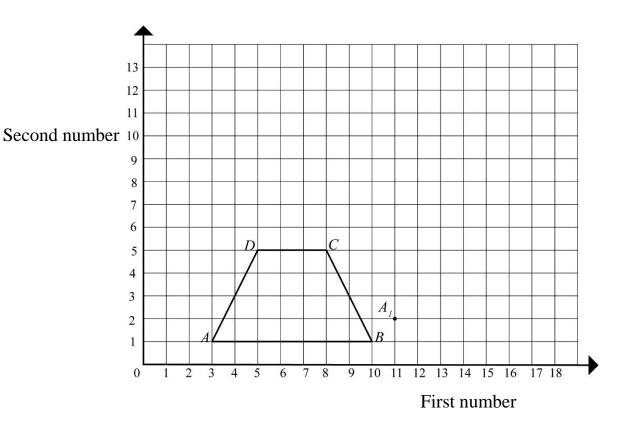
(b) Name any pair of perpendicular lines.

*Answer* (*b*)......[1]

(c) Calculate the size of angle *NOB*.

*Answer* (*c*).....[2]

16 The coordinate diagram shows quadrilateral *ABCD*.



(a) Name quadrilateral *ABCD*.

(b) Quadrilateral ABCD is slided to form image  $A_1B_1C_1D_1$ .

The coordinates of  $A_1$  are (11, 2) as shown on the coordinate diagram.

(i) Describe fully the slide movement from quadrilateral ABCD to quadrilateral  $A_1B_1C_1D_1$ .

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(ii) Draw quadrilateral  $A_1B_1C_1D_1$  after the sliding. [3]

(iii) Write the coordinates of  $C_1$ .

*Answer (b)*(iii). .....[1]

(c) Reflect quadrilateral ABCD on the line DC. [3] Label the image  $A_2B_2C_2D_2$ .

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