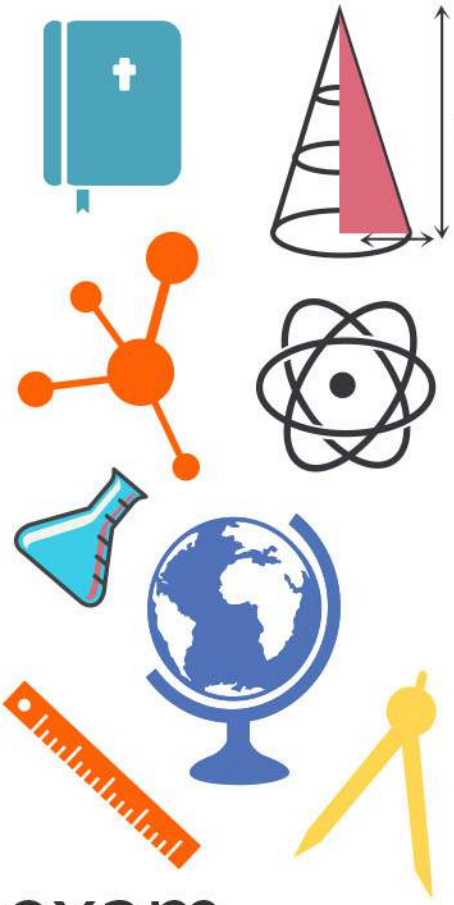


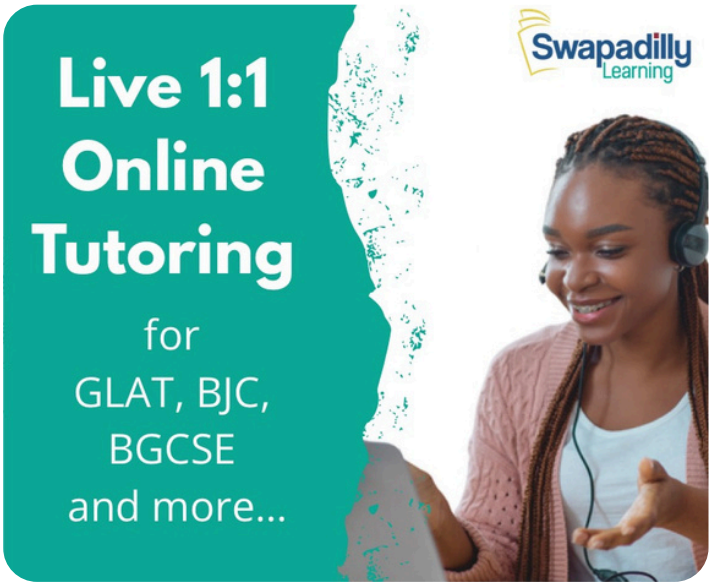
student **BJC** exam

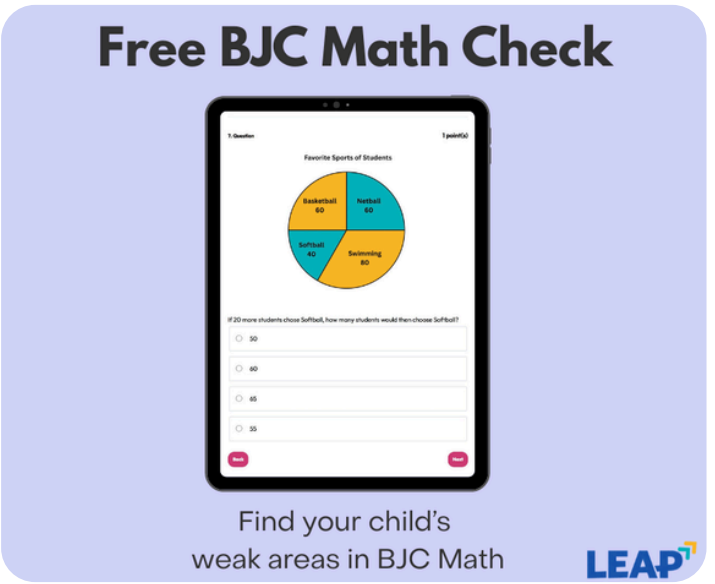
Past Paper Booklet

Mathematics

THE STUDENT SHED

More resources you might like...





FOR EXAMINERS' USE ONLY	
TOTAL	

SCHOOL No.	CANDIDATE No.
INITIALS	SURNAME

MINISTRY OF EDUCATION
BAHAMAS JUNIOR CERTIFICATE EXAMINATION 2024

0044 MATHEMATICS

PAPER 1 (50 Marks)

Friday **31 MAY 2024** 9:00 A.M.–10:00 A.M.

INSTRUCTIONS TO CANDIDATES:

Do not open this booklet until you are told to do so.

Write your school number, candidate number as well as your Initial(s) and Surname in the spaces provided on this question booklet.

Answer **ALL** questions in the spaces provided in this question booklet.

ALL working must be shown.

The use of calculators, tables or other calculation aids is **NOT** allowed.

ALL working is to be done in **blue** or **black ink**. Working and Answers written in pencil, **except for constructions and graphs**, may not be marked.

ALL diagrams are not drawn to scale unless otherwise indicated.

The mark for each question, or part question, is shown in brackets [ ].

© MOE 2024 [Turn over

ROUGH WORK

1. (a)
$$\begin{array}{r} 7409 \\ 362 \\ +\quad 57 \\ \hline \\ \hline \end{array}$$

Answer: _____ [1]

(b)
$$\begin{array}{r} 9367 \\ -\ 1425 \\ \hline \\ \hline \end{array}$$

Answer: _____ [1]

---

2. (a)
$$\begin{array}{r} 743 \\ \times\quad 6 \\ \hline \\ \hline \end{array}$$

Answer: _____ [1]

(b) $8\overline{)5264}$

Answer: _____ [1]

---

3. State the value of ***2*** in 53276

Answer: _____ [1]

ROUGH WORK

4. From the set of numbers {9, 10, 11, 12},
using each number **only once**, write down a/an:

(a) even number, _____ [1]

(b) square number, _____ [1]

(c) prime number, _____ [1]

(d) multiple of 4. _____ [1]

---

5. Given the number **0.18** ,

(a) write in word form _____ [1]

(b) round to the nearest tenth _____ [1]

---

6. Express 88% as a

(a) decimal,

Answer: _____ [2]

(b) fraction in its lowest term.

Answer: _____ [2]

---

7. Complete the sequence.

(a) 6, 9, 12, 15, 18, _____, _____. [2]

(b) 3, 5, 9, 15, 23, _____, _____. [2]

ROUGH WORK

8. Calculate $\frac{2}{3}$ of 27.

Answer: _____ [2]

---

9. The prime factorisation of a number is $2 \times 2 \times 2 \times 3 \times 5$.

(a) Write the above product in index form.

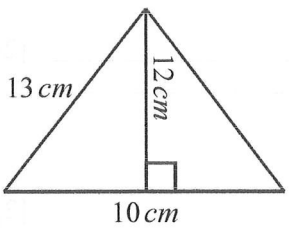
Answer: _____ [1]

(b) What was the factorised number?

Answer: _____ [1]

---

10. Calculate the area of the triangle shown in the diagram below.



Answer: _____ cm^2 [3]

ROUGH WORK

11. (a) Simplify the following expression

$$3x + 4y + 9y + 5x - 11y$$

Answer: _____ [2]

(b) Given that $m = 7$ and $n = 2$, calculate the value of

$$mn + 5$$

Answer: _____ [2]

(c) Solve for k.

$$\frac{k}{3} = 12$$

Answer: _____ [1]

---

12. The ratio of boys to girls in a class is 3 : 5 respectively.

If there are 15 girls in the class, determine the

(a) number of boys in the class,

Answer: _____ [2]

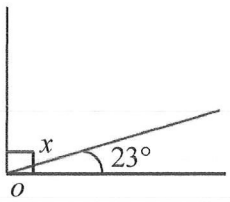
(b) total number of students in the class.

Answer: _____ [1]

ROUGH WORK

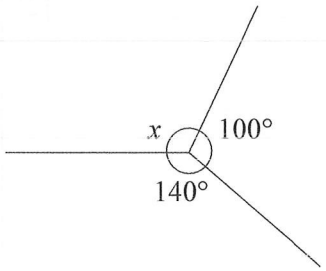
13. Calculate the missing angles marked with the letter x in the shapes below.

(a)



Answer: _____ ° [2]

(b)



Answer: _____ ° [3]

14. Tommy picks 56 mangoes. Jackie picks 38 mangoes.

(a) Calculate the number of mangoes that were picked altogether.

Answer: _____ [2]

They used the mangoes to make jam and 15 mangoes were left over.

(b) Calculate the number of mangoes that were used to make the jam.

Answer: _____ [2]

ROUGH WORK

15. A jar contains 13 gumballs. 7 red, 4 blue and 2 yellow.

If a gumball is selected at random, what is the probability of selecting a

(a) blue,

Answer: _____ [1]

(b) red or yellow,

Answer: _____ [2]

(c) white.

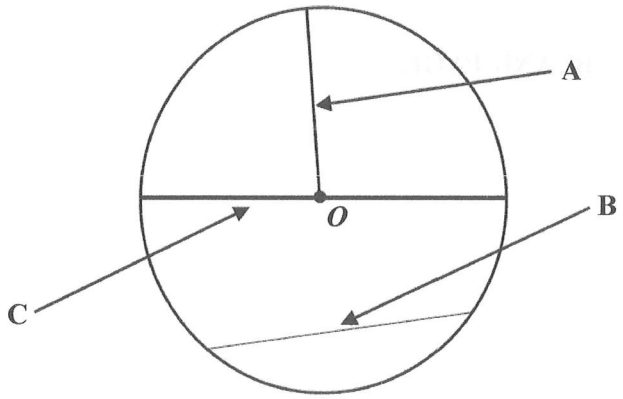
Answer: _____ [1]

---

16. Use the words in the box below to label the circle.

"***O***" is the centre of the circle.

diameter	radius	chord	segment



Answer: **A** _____ [1]

Answer: **B** _____ [1]

Answer: **C** _____ [1]

End]

BLANK PAGE

FOR EXAMINERS' USE ONLY	
TOTAL	

SCHOOL No.	CANDIDATE No.
INITIALS	SURNAME

MINISTRY OF EDUCATION
BAHAMAS JUNIOR CERTIFICATE EXAMINATION 2024

0044 MATHEMATICS

PAPER 2 (100 Marks)

Tuesday **4 JUNE 2024** 9:00 A.M.–11:00 A.M.

INSTRUCTIONS TO CANDIDATES:

Write your school number, candidate number as well as your Initial(s) and Surname in the spaces provided on this question booklet.

Answer **ALL** questions in the spaces provided on this question booklet.

ALL working must be shown.

The use of calculators, tables or other calculation aids is **NOT** allowed.

ALL working is to be done in **blue** or **black ink**. Working and answers written in pencil, **except constructions and graphs**, may not be marked.

ALL diagrams are not drawn to scale unless otherwise indicated.

The mark for each question, or part question, is shown in brackets [ ].

This question paper consists of **15** printed pages and **1** blank page.

© MOE 2024

ROUGH WORK

1. Evaluate: $3^2 + \sqrt{121}$

Answer: _____ [3]

---

2. A movie begins at 11:35 a.m. and ends at 1:20 p.m.

Calculate the length of time of the movie.

Answer: _____ [2]

---

3. (a) Write as a decimal.

$14 + \frac{3}{100}$

Answer: _____ [2]

(b) Express **5.1964** correct to 2 significant figures.

Answer: _____ [1]

ROUGH WORK

4. Susan filled her car's gas tank with 12 gallons of gas.

The price for a gallon of gas is $5.85.

Calculate how much money Susan spent on gas.

Answer: $ _____ [2]

---

5. A sweatshirt cost $18.00 .

(a) Calculate the cost of 4 sweatshirts

Answer: $ _____ [2]

The store offers a 20% discount on sweatshirts.

Calculate the

(b) amount of discount on the 4 sweatshirts

Answer: $ _____ [2]

(c) sale price of the 4 sweatshirts

Answer: $ _____ [2]

ROUGH WORK

6. In Mathematics class, Tory has the following results

60%, 75%, 65%, 85% and 75%.

(a) Write his

(i) median score,

Answer: _____ [2]

(ii) modal score.

Answer: _____ [1]

(b) Calculate his average score.

Answer: _____ [3]

---

7. A case of juice was priced at $18.95 before VAT was added. VAT is 10%.

Calculate the

(a) total amount of VAT placed on the case of juice,
(give your answer to the nearest cent).

Answer: _____ [2]

(b) total cost of the case of juice inclusive of the VAT.

Answer: _____ [2]

ROUGH WORK

8. Isaiah thinks of a number doubles it and adds 3.

(a) Write an expression to show the phrase above.

Answer: _____ [2]

His result is 15.

(b) Write an equation to show this information.

Answer: _____ [1]

(c) Solve the equation to determine the number Isaiah thought of.

Answer: _____ [2]

ROUGH WORK

9. Mary is given \$90 per week for her allowance.

She spends \$15 on school supplies.

(a) Calculate the fraction she spends on school supplies.
(Give your answer in its lowest term.)

Answer: _____ [2]

(b) How much money does she have left?

Answer: _____ [1]

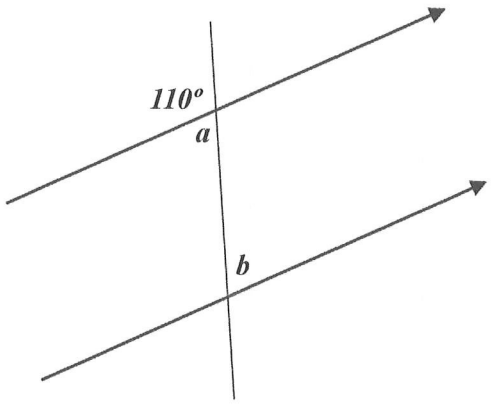
She spends $\frac{2}{5}$ of the remaining sum of money on a blouse.

(c) Calculate the amount of money spent on the blouse.

Answer: _____ [2]

ROUGH WORK

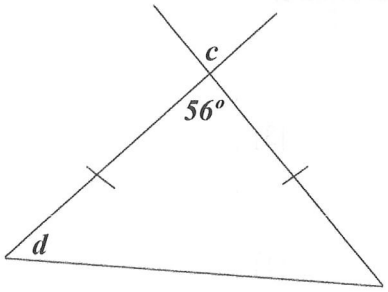
10. Determine the value of the angles marked by letters.



NOT DRAWN TO SCALE

Answer: a = _____ ° [2]

Answer: b = _____ ° [1]



NOT DRAWN TO SCALE

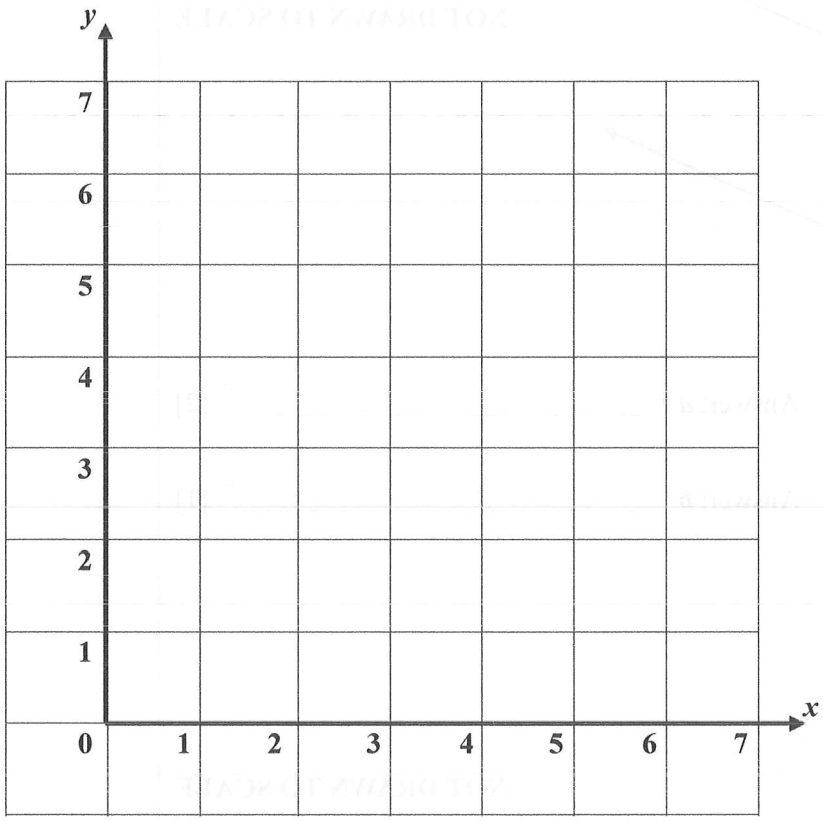
Answer: c = _____ ° [1]

Answer: d = _____ ° [2]

ROUGH WORK

11. (a) Plot, label and join the following points on the grid below.

A(2, 3) B(2, 1) C(4, 1).



[3]

(b) Give the special name of this triangle.

Answer: _____ [1]

(c) Move triangle ***ABC*** 2 units to the right and 3 units up. [2]

ROUGH WORK

12. Mr. Green builds a rectangular patio that measures 14 feet by 18 feet.

(a) Calculate the area of the patio.

Answer: _____ ft.^{2} [2]

The patio is to be painted. A can of paint covers 12 square feet.

(b) Calculate the number of cans of paint needed.

Answer: _____ [2]

Each can of paint cost $13.50.

(c) Calculate the total cost of the paint.

Answer: $ _____ [2]

ROUGH WORK

13. $\varepsilon = \{\textit{whole numbers from } 1 \textit{ to } 10 \textit{ inclusive}\}$

$A = \{2,\ 4,\ 6,\ 8,\ 10\}$
$B = \{1,\ 2,\ 4,\ 8\}$.

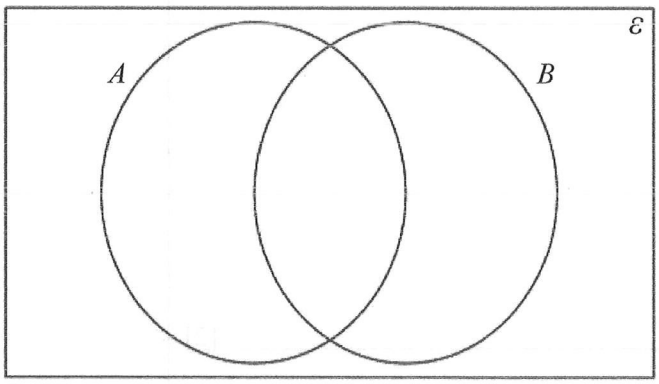
(a) List the members of set

(i) $A \cup B = \{$_____$\}$ [2]

(ii) $A \cap B = \{$_____$\}$ [2]

(iii) $(A \cup B)' = \{$_____$\}$ [2]

(b) Using the information above complete the Venn Diagram. [4]



ROUGH WORK

14. A laptop has a cash price of $3500.00 .

It can also be purchased on a hire purchase plan by paying 30% deposit of the cash price follow by 24 monthly payments of $125 per month.

Hire Purchase Plan
30% of cash price
+
24 monthly payments
of $125.00 per month

Calculate the

(a) down payment,

Answer: _____ [2]

(b) total of the monthly payments,

Answer: $_____ [2]

(c) total cost of the laptop on the hire purchase plan,

Answer: _____ [2]

(d) saving if the laptop was bought cash.

Answer: $_____ [2]

ROUGH WORK

15. (a) Given the line AB below, use a protractor and draw an angle of 70° at A.

[2]

A B

(b) With a pair of compasses bisect the angle drawn in part (a). [3]

ROUGH WORK

16. (a) A gardener works a basic week of 40 hours. He is paid $14 per hour.

Calculate his basic weekly pay.

Answer: $ _____ [2]

(b) Overtime is paid at time and a half.

Calculate his earning for one hour overtime.

Answer: $_____ [2]

(c) Last week he worked a total of 47 hours.

Find the number of hours of overtime he worked.

Answer: _____ [1]

(d) Calculate the amount he earned in overtime that week.

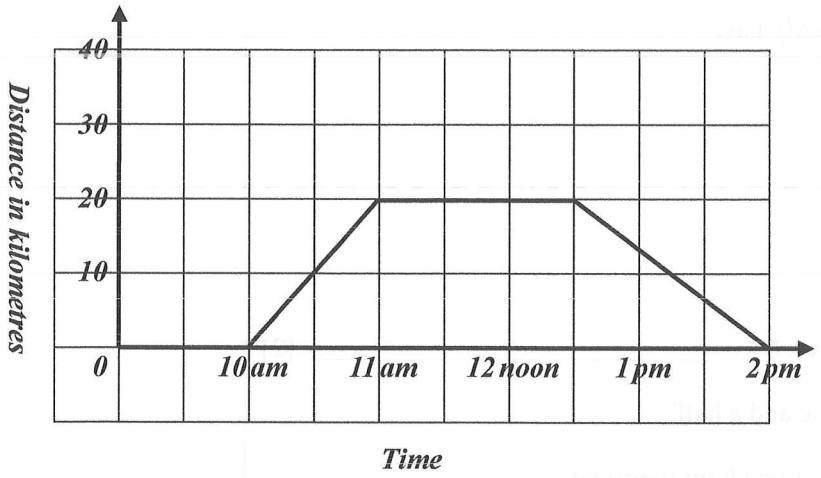
Answer: $_____ [2]

(e) Calculate his total earning for that week.

Answer: $_____ [2]

ROUGH WORK

17. The graph below shows Anna journey from home to the park.



(a) State

(i) the time Anna left home,

Answer: _____ [1]

(ii) how far Anna's home is from the park,

Answer: _____ [1]

(iii) how long Anna stayed at the park.

Answer: _____ [1]

(b) Calculate her average speed for the journey **home**.

Answer: _____ [3]

ROUGH WORK

18. Mr. Walker purchases the following items.

(a) Calculate his total bill.

Items	Quantity	Unit Price	Total	
Bread	2 loaves	$4.20 each		[2]
Tuna	6 cans	2 for $1.08		[2]
Mayonnaise	1 bottle	$8.50		[1]
		Total		[1]

(b) Calculate his change from $25.00 .

Answer: $_____ [2]

BLANK PAGE