

B G C S E

MATHEMATICS

EXAMINATION PAPERS

UNDERSTAND • PRACTICE • SUCCEED





THE OPENHANDED CLASSROOM

LEARN MORE. ACHIEVE MORE. SMILE MORE.



BGCSE CLASSES

- ✓ Exam-Focused Learning
- ✓ Past Papers & Strategies
- ✓ Stronger Understanding
- ✓ Better Grades, Brighter Future



[**CLICK HERE**](#)



SAT CLASSES

- ✓ Smart Test Strategies
- ✓ Stronger Scores
- ✓ Time Management Skills
- ✓ College & Scholarship Ready



[**CLICK HERE**](#)



BJC CLASSES

- ✓ Clear, Simple Explanations
- ✓ Focus on Understanding
- ✓ Help That Fits Your Pace
- ✓ Build Confidence, Get Results



[**CLICK HERE**](#)



EXPERT TEACHING.
PROVEN RESULTS.



LEARN SMARTER.
ACHIEVE MORE.



FOCUSED SUPPORT.
REAL RESULTS.



THEOPENHANDEDCLASSROOM:
(242) 426-8891



THE OPENHANDED CLASSROOM

BGCSE FREE SOLUTIONS MANUALS

COMPLETE SOLUTIONS FOR ALL
MAJOR SUBJECTS

- ⦿ MATHEMATICS
- ⦿ ENGLISH LANGUAGE
- ⦿ HISTORY
- ⦿ RELIGIOUS STUDIES
- ⦿ ACCOUNTS
- ⦿ SCIENCES (BIOLOGY, PHYSICS,
COMBINED SCIENCE)
- ⦿ FOREIGN LANGUAGE
(FRENCH AND SPANISH)

UNDERSTAND. PRACTICE. SUCCEED.

[CLICK HERE](#)

EXAM-REAL.

EXAM-PROVEN.

FREE LISTENING COMPREHENSION — AUDIO FILES —



THE **EXACT AUDIO** USED
IN PAST BJC & BGCSE EXAMS



REAL EXAMS

The exact listening comprehension audio from past papers.



REAL PREPARATION

Hear what you'll hear in the real exam.



REAL RESULTS

Practise with purpose. Improve your confidence and performance.

AVAILABLE FOR:



BJC

ENGLISH



BGCSE

**ENGLISH
LANGUAGE**



BJC

FRENCH



BJC

SPANISH



BGCSE

FRENCH



BGCSE

SPANISH

WHY THESE AUDIO FILES MATTER



EXACT AUDIO

The exact recordings used in past BJC & BGCSE exams.



EXAM FAMILIARITY

Get used to the real voices, speed, accents and exam conditions.



STRATEGIC ADVANTAGE

Walk in confident knowing exactly what to expect.



100% FREE

High quality. No cost. Just results.



CLICK HERE

DOWNLOAD • START PRACTISING



BETTER PREPARATION.
BETTER RESULTS.

You've got this!

PAST EXAMS. **REAL AUDIO**. BETTER PREP. GREATER CONFIDENCE.

School Number	Candidate Number
Surname and Initials	

MATHEMATICS

PAPER 1 (CORE/EXTENDED) 3815/1

Tuesday **20 MAY 2025** 1:00 P.M.–2:30 P.M.

Additional materials:
Calculator (not graphing)
Geometrical instruments

MINISTRY OF EDUCATION NATIONAL EXAMINATIONS

BAHAMAS GENERAL CERTIFICATE OF SECONDARY EDUCATION

INSTRUCTIONS TO CANDIDATES

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

Write your School Number, Candidate Number, Surname and Initials in the spaces provided at the top of this page.

Answer **ALL** questions in the spaces provided for each question.

ALL working must be shown.

ALL working must be done in blue or black ink, except for drawings, lines and constructions which may be done in pencil.

INFORMATION FOR CANDIDATES

Calculators [**NOT GRAPHING CALCULATORS**] may be used.

Tracing paper may be used.

Geometrical instruments are required.

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

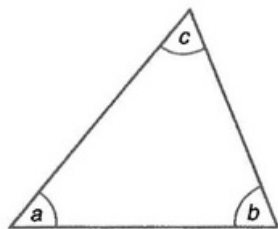
The total number of marks for this paper is 100.



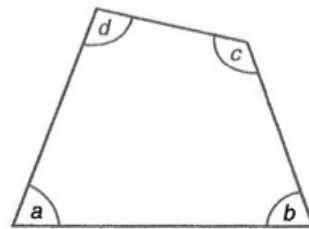
This question paper consists of 15 printed pages and 1 blank page.

INFORMATION AND FORMULAE

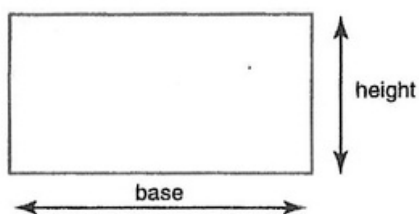
MENSURATION



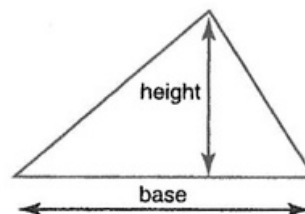
Angle sum of triangle
 $a + b + c = 180^\circ$



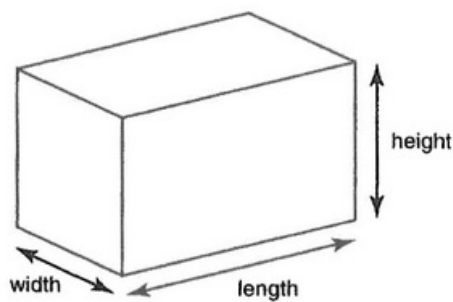
Angle sum of quadrilateral
 $a + b + c + d = 360^\circ$



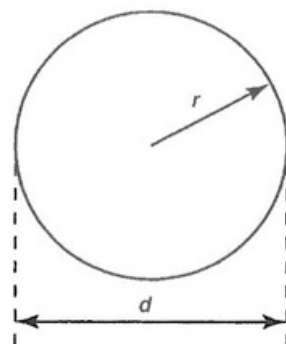
Area of rectangle = base $\times$ height



Area of triangle = $\frac{\text{base} \times \text{height}}{2}$



Volume of cuboid = length $\times$ width $\times$ height



Circumference of circle = $2\pi r$ or πd
Area of circle = πr^2

NUMBER

Standard form is $a \times 10^n$ where $1 \leq a < 10$ and n is an integer.



1. A number pattern is shown below.

$$\begin{array}{rcl} 1 & & = 1 \\ 1 + 2 & & = 3 \\ 1 + 2 + 3 & & = 6 \\ 1 + 2 + 3 + 4 & & = 9 \\ \boxed{} & & \\ 1 + 2 + 3 + 4 + 5 + 6 & & = 21 \end{array}$$

- (a) Write the missing row from the number pattern in the box above. [1]
- (b) Find the sum of the 10th row.

Answer: _____ [1]

2. Write the following ratios in their simplest form:

(a) $144 : 360$

Answer: _____ [1]

(b) $\frac{7}{8} : \frac{11}{4}$

Answer: _____ [1]

(c) $68\text{ g} : 1.9\text{ kg}$

Answer: _____ [1]

[Turn over]

3. (a) Find the exact value of $\frac{575.6492 - 126.38}{2.4}$

Answer: _____ [1]

- (b) Give your answer in part (a) correct to

(i) 2 significant figures, Answer: _____ [1]

(ii) the nearest hundredth. Answer: _____ [1]

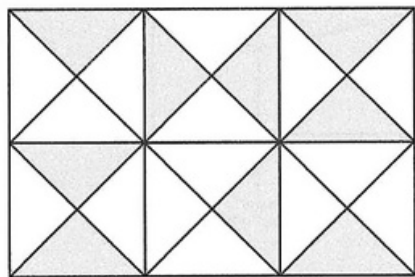
4. Insert one of the symbols in the space provided to make the given statement true:

<, >, =

(a) $\frac{8}{17}$ 0.47 [1]

(b) $\sqrt{250}$ 2^4 [1]

5. The diagram shows a triangular tile arrangement.



- (a) State in lowest terms the fraction of the tiles that are shaded.

Answer: _____ [1]

- (b) Give your answer to part (a) as a decimal.

Answer: _____ [1]



6.



Rolls of plait are used to make straw bags.

It takes $\frac{1}{3}$ of a roll to make a straw purse.

It takes $\frac{4}{5}$ of a roll to make a tote bag.

If seven rolls of plait are available, find the fraction that is left after making 5 purses and 6 tote bags.

Answer: _____ [4]

7. Evaluate, giving your answer as a fraction:

$$42\frac{3}{8} - \left(1\frac{2}{7} + 4\frac{2}{3}\right) \div \frac{1}{7}$$

Answer: _____ [3]

[Turn over



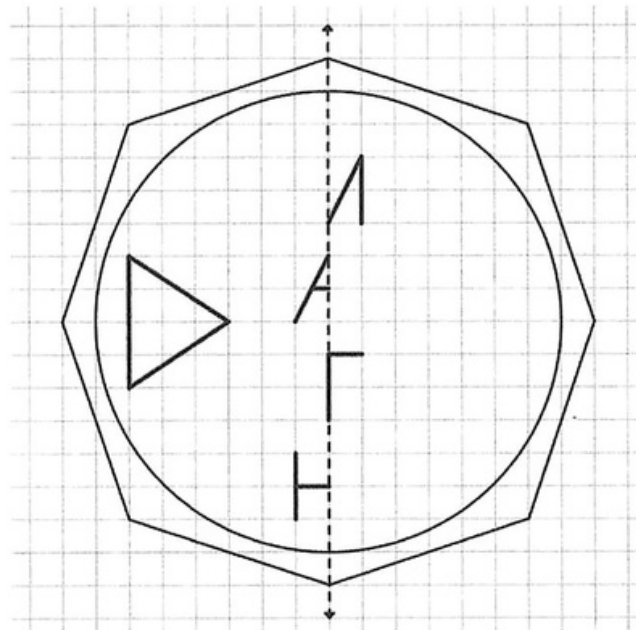
8. Lemonade is made using 2 parts lemon juice, 3 parts syrup and 10 parts water.
- (a) If 4,500 *ml* of lemonade is made, determine the amount of syrup needed.

Answer: _____ *ml* [2]

- (b) Find the amount of lemonade that can be made with 200 *ml* of lemon juice.

Answer: _____ *ml* [2]

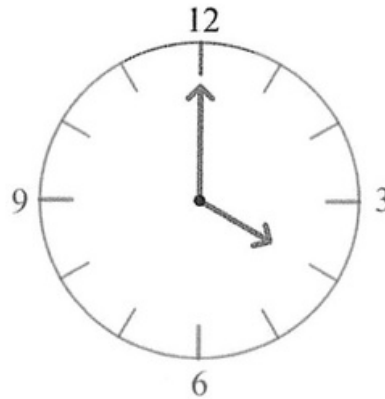
9.



Complete the diagram so that it is symmetric about the dashed line.

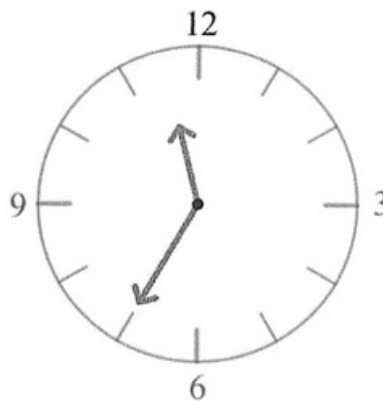
[4]

10. (a) Determine the obtuse angle between the hour and minute hands in the clock below.



Answer: _____ ° [2]

- (b) (i) State the clock time below.



Answer: _____ [1]

- (ii) If the time in (b)(i) is in the morning, state the time it would be in 8 hours and 45 minutes.

Answer: _____ p.m. [2]

- (c) State 2:50 p.m. in the 24-hour clock.

Answer: _____ [1]

11.



There are 150 junkanoo enthusiasts at an event.

15 play the cowbells.

42 play the horns.

28 are dancers.

The remainder play the drums.

If one enthusiast is selected at random, find the probability that the person

(a) plays the drums,

Answer: _____ [2]

(b) is not a dancer,

Answer: _____ [1]

(c) plays cowbells or horns,

Answer: _____ [1]

(d) plays the piano.

Answer: _____ [1]



12. (a) Write 108 as a product of prime factors.

Answer: _____ [2]

- (b) Find the smallest number by which 108 must be multiplied to make the product a perfect square.

Answer: _____ [1]

13. Mark takes $\frac{3}{4}$ hour to drive to his place of work 36 km away.

- (a) What was his average speed in km/h?

Answer: _____ km/h [2]

Over the weekend, Mark took a road trip on which he travelled at an average speed of 52 km/h for $2\frac{1}{2}$ hours.

- (b) Calculate the total distance travelled during the trip.

Answer: _____ km [2]

[Turn over



14. The following information shows the cost **per person** for one night's stay at the hotels listed.

HOTEL	MIDWEEK (\$)	WEEKEND (\$)
MOONLIGHT HOTEL	128.00	138.00
FARRIOT	134.00	144.00
PINEAPPLE LODGE	161.00	171.00
MILTON	156.00	166.50

***All prices include taxes.**

- (a) (i) State which hotel has the lowest midweek rate.

Answer: _____ [1]

- (ii) Find the difference between the cheapest and most expensive midweek rate.

Answer: \$ _____ [1]

- (b) Calculate the total cost for 2 persons staying at the Milton on a Wednesday night.

Answer: \$ _____ [2]

- (c) On a Saturday night, 4 persons stayed at the Farriot.

Rental for a van totaled \$85.

The cost of food and entertainment cost \$130 per person.

Calculate the total cost for all 4 persons.

Answer: \$ _____ [3]

A person stayed at the Moonlight Hotel on Saturday night and paid a total of \$27.60 in taxes.

- (d) (i) Find the cost of the room before taxes.

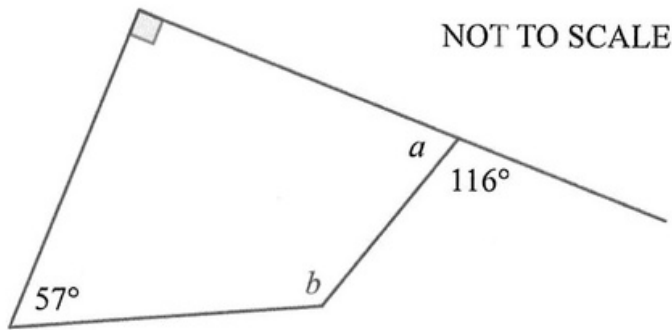
Answer: \$ _____ [1]

- (ii) State the tax amount as a percentage of the cost of the room before tax was included.

Answer: _____ % [2]

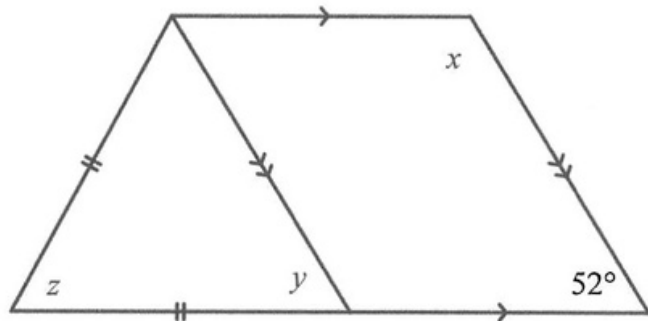


15. Find the sizes of the lettered angles in the diagrams below.



a : _____ $^{\circ}$ [1]

b : _____ $^{\circ}$ [1]



x : _____ $^{\circ}$ [1]

y : _____ $^{\circ}$ [1]

z : _____ $^{\circ}$ [1]

16. At a souvenir shop, the price of a keychain is \$ x .
The cost of a magnet is \$2 less than the cost of a keychain.

(a) Write an expression for the cost of a magnet.

Answer: _____ [1]

The cost of a t-shirt is \$7 more than twice the cost of a keychain.

(b) Write an expression for the cost of a t-shirt.

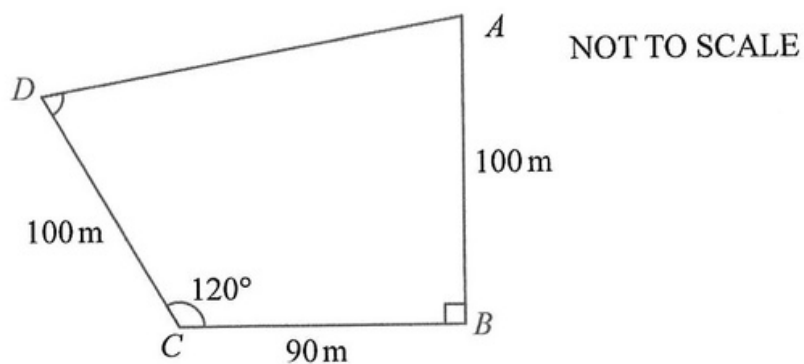
Answer: _____ [2]

(c) If the total cost of all three items is \$37, write and solve an equation to find the cost of a keychain.

Answer: \$ _____ [3]



17. A surveyor's diagram shows a plot of land $ABCD$.



- (a) Using a scale of 1 cm to 10 m draw and label an accurate scale drawing of the plot of land. [5]

- (b) From your diagram, give the actual length AD in meters.

Answer: _____ m [2]

- (c) Measure and state the size of $\hat{ADC}$.

Answer: _____ ° [1]



18. Simplify:

(a) $8ab - 15c - 3ab - 6c$

Answer: _____ [2]

(b) $2p \times 3p^2$

Answer: _____ [2]

(c) $\frac{24xy^2}{8xy}$

Answer: _____ [2]

19. (a) A bottle of juice with a regular price of \$5.00 is on special for \$4.65.

Find the percentage discount.

Answer: _____ % [2]

(b) A lamp normally priced at \$250 is sold at a 12% discount.

Find the selling price.

Answer: \$ _____ [2]

(c) The price of a dozen eggs is marked up by 8% due to a shortage.

Find the new price if the regular price was \$4.75 per dozen.

Answer: \$ _____ [2]

[Turn over



20. The table below shows the number of days of rainfall each month in a tropical rainforest for the year 2019.

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Days of Rainfall	8	5	7	6	10	15	17	19	17	15	10	9

- (a) State the month with the least days of rainfall.

Answer: _____ [1]

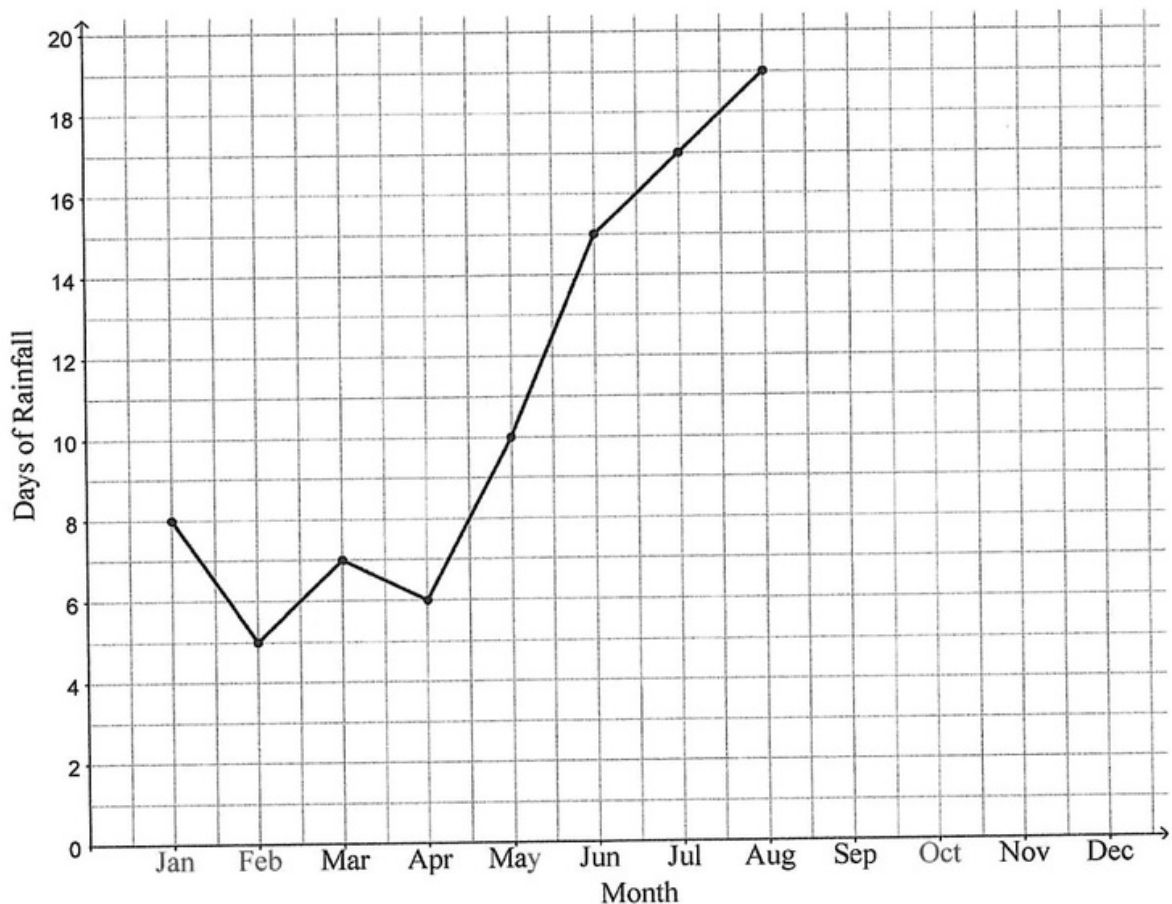
- (b) Find the mean number of days of rainfall.

Answer: _____ [2]

- (c) State the mode or modes for the number of days of rainfall.

Answer: _____ [1]

- (d) Using the information from the table, complete the line graph below [4]



21. A furniture store advertises a living room set for \$4,700 cash price.

This can be purchased on hire purchase detailed below:

- Down payment of \$725
- Simple interest charged on the balance at a rate of 12% per annum for duration of hire purchase.

She completes payment in 2 years.

- (a) Calculate the interest charged.

Answer: \$ _____ [3]

The balance plus interest is repaid in equal monthly instalments over the 2 years.

Calculate:

- (b) the amount of each monthly instalment,

Answer: \$ _____ [2]

- (c) the total cost of the living room set on the hire purchase plan.

Answer: \$ _____ [1]



BLANK PAGE

