0044/1

BJC

SCHOOL No.	CANDIDATE No.
INITIALS	SURNAME

MINISTRY OF EDUCATION
BAHAMAS JUNIOR CERTIFICATE
EXAMINATION 2021

0044 MATHEMATICS

PAPER 1 (50 Marks)

Monday **21 JUNE 2021** 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 [ ].

This question paper consists of **7** printed pages and **1** blank page.

1. Write these numbers in order of size. Start with the smallest number.

5.02   5.2   5.052   5.025   5.202

Answer: _____ [1]

2. State the following:

(a)   The even integer just before 92.   _____ [1]

(b)   The next prime number after 13.   _____ [1]

(c)   The first square number after 7.   _____ [1]

(d)   The largest factor of 12   _____ [1]

3. Which of the letter(s) below has 2 lines of symmetry?

H T R

Answer: _____ [1]

4. Fill in the blanks

(a)   7, 14, 21, 28, _____   [1]

(b)   144, 72, 36, 18, _____   [1]

5. Fill in the blanks below using the symbols $\in$, $\subset$, or $\cup$ to make a true statement

(i)   f   [   ]   {e, f, g}   [1]

(ii)   {f}   [   ]   {e, f, g}   [1]

6. John scored 24 out of 40 on a test. Calculate his percentage score.

Answer: _____ [2]

7. (a) Express $3\frac{1}{4}$ as an improper fraction

Answer: _____ [1]

(b) Multiply your answer from part (a) by **8**

Answer: _____ [2]

8. The sum of two square numbers is 29.

(a) List the two square numbers

Answer: _____ [1]

(b) Calculate the difference of these two square numbers.

Answer: _____ [2]

9. (a) Calculate the complement angle of 34°

    Answer: _____ [2]

    (b) Using your protractor, draw the complementary angle to 30° on the ray **BC** below:

    B ———————————————→ C

    [1]

10. Given that $g = 9$ and $h = -4$

    Calculate the value of:

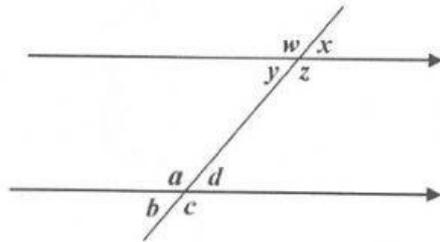 $2g + 3h$

    Answer: _____ [2]

11. Calculate the value of;

    $2^3 - \sqrt{25}$

    Answer: _____ [3]

12.

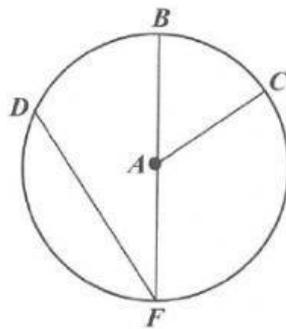(a)   Identify a pair of alternate angles.

Answer: _____ [1]

(b)   Identify a pair of corresponding angles.

Answer: _____ [1]

(c)   If angle $a = 70°$, calculate the size of angle b.

Answer: _____° [1]

13.   (a)   Study the diagram below and then answer the questions that follows.

(i)   **BF** is called   _____ [1]

(ii)   **AC** is called   _____ [1]

(iii)   **DF** is called   _____ [1]

(b)   If **AB = 3 cm**, calculate the area of the circle, given $\pi = 3.14$.

Answer: _____ [3]

14. Ashley weekly expenses are listed below.

      Food store: ………….…….. $46.28

      Gas station: ……….….….. $25.17

      Lunch: ……………………. $15.25

(a) Calculate the total amount of money she spends for the week.

Answer: _____ [2]

(b) Calculate her change from $100.

Answer: _____ [2]

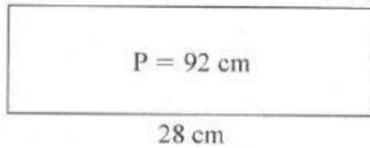15. (a) Solve for p:

$5p - 13 = 42$

Answer: _____ [2]

(b) Simplify:

$2g + 8h + 5g - 2h$

Answer: _____ [2]

16.

P = 92 cm

28 cm

NOT DRAWN TO SCALE

The perimeter of the rectangle above is 92 cm. The length is 28 cm. Calculate the width of the rectangle.

Answer: _____ cm [3]

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17. Mark left home at 7:24 am and arrived at school at 8:50 am.

(a) How long did Mark take to arrive at school?

Answer: _____ [2]

(b) Express your answer from part (a) in minutes.

Answer: _____ [2]