First Term Test 2025/2026

S1 **Mathematics** **Time: 70 min**

Name: _____ S1 ____ ( ) Marks: _____/100

Question-Answer Book

INSTRUCTIONS:

1. Write your class, name and class number in the spaces provided on Page 1 and MC answer sheet.

2. Supplementary answer sheets will be supplied on request. Write your class, name and class number on each sheet, and staple them with this Question-Answer Book.

3. The diagrams in this paper are not necessarily drawn to scale.

4. You are **NOT ALLOWED** to use calculators.

For Section A Multiple Choice Questions,

5. **ANSWER ALL QUESTIONS.** You are advised to use an HB pencil to mark all the answers on the Answer Sheet, so that wrong marks can be completely erased with a clean rubber. You must mark the answers clearly; otherwise you will lose marks if the answers cannot be captured.

6. You should mark only **ONE** answer for each question. If you mark more than one answer, you will receive **NO MARKS** for that question.

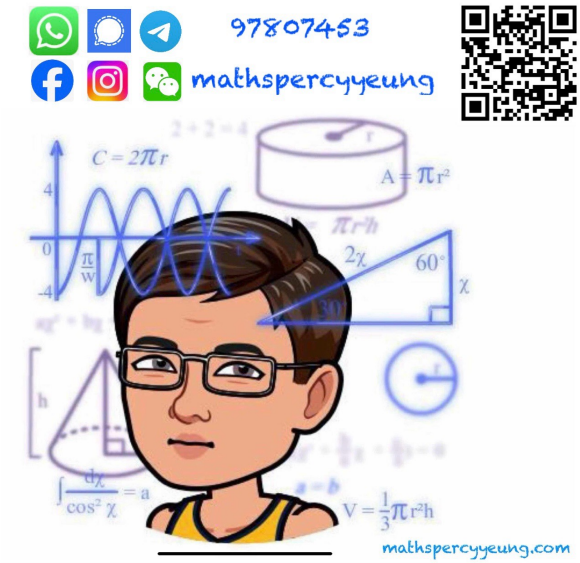
For Section B Conventional Questions,

7. Attempt ALL questions in this paper. Write your answers in the spaces provided in this Question-Answer Book. Do not write in the margins. Answers written in the margins will not be marked.

8. Unless otherwise specified, all working must be clearly shown.

9. Unless otherwise specified, numerical answers should be exact.

Section A: Multiple Choice Questions (36 marks)



1. Evaluate $-3(+4)-(-2)$.

   A. 24

   B. 3

   C. −10

   D. −14

2. Which of the following is the smallest non-negative integer?

   A. −1

   B. 0

   C. 1

   D. 2

3. How many prime numbers are there between 0 and 5 inclusively?

   A. 2

   B. 3

   C. 4

   D. 5

4. The result of "divide the sum of 16 and 24 by the product of 2 and 4" is

   A. $\frac{1}{5}$.

   B. 5.

   C. 10.

   D. 19.

5. Which of the following expressions has a result different from the others?

   A. $8-4\times2$

   B. $8\div2-4$

   C. $(8-4)\times2$

   D. $8+2-10$

6. Find the prime factorization of 360.

   A. $2^3 \times 3^2$

   B. $2^2 \times 3^3 \times 5$

   C. $2^3 \times 3^2 \times 5$

   D. $6^2 \times 10$

7. Which of the followings have the same result?

I. $3^2 - 3$ II. $(-3)^2(-3)$ III. $-3^2 - 3$ IV. $(-3)^2 - 3$

A. I and II only

B. I and IV only

C. II and III only

D. III and IV only

8. $15A0B2$ is a 6-digit number and is divisible by 4, where A and B are integers from 0 to 9 inclusive. Which of following numbers may be the value of B?

A. 0

B. 1

C. 2

D. 4

9. In a building, Ben lives 5 levels below Amy, and Caroline lives 7 levels above Ben. Which of the following is correct?

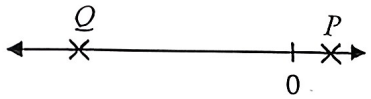
A. Amy lives 2 levels below Caroline.

B. Amy lives 3 levels below Caroline.

C. Amy lives 2 levels above Caroline.

D. Amy lives 3 levels above Caroline.

10. Two directed numbers P and Q are marked on the number line below.



Which of the following result must be negative?

I. $P-Q$ II. $Q-P$ III. $P\times Q-P$ IV. $\frac{P}{Q}+Q$

A. I only.

B. II only.

C. I and III only.

D. II, III and IV only.

11. Arrange the following numbers in descending order: $-\frac{7}{6}$, 1.5, −1.3, $-\frac{5}{6}$

A. $-1.3\ ,\ -\frac{7}{6}\ ,\ -\frac{5}{6}\ ,\ 1.5$

B. $1.5\ ,\ -\frac{7}{6}\ ,\ -\frac{5}{6}\ ,\ -1.3$

C. $1.5\ ,\ -1.3\ ,-\frac{7}{6}\ ,\ -\frac{5}{6}$

D. $1.5\ ,\ -\frac{5}{6}\ ,\ -\frac{7}{6}\ ,\ -1.3$

12. Which of the following numbers is divisible by both 8 and 9?

A. 136 008

B. 136 009

C. 136 016

D. 136 116

13. If a number is divisible by 12, then the number must be

I. divisible by 3. II. divisible by 6. III. divisible by 9.

A. I and II only

B. I and III only

C. II and III only

D. I, II and III

14. Find the H.C.F. and L.C.M. of 180 and 525.

	H.C.F	L.C.M.
A.	3×5	$2^2 \times 3^2 \times 5^2 \times 7$
B.	3×5	$2^2 \times 3^3 \times 5^3 \times 7$
C.	$3^2 \times 5^2$	$2^2 \times 3^2 \times 5^2 \times 7$
D.	$3^2 \times 5^2$	$2^2 \times 3^3 \times 5^3 \times 7$

15. Which of the following equations has $x = 4$ as its solution?

A. $\frac{7+2x}{3} - 3 = 8$

B. $-x = \frac{x+4}{8} - 2$

C. $\frac{-6-x}{5} = 2$

D. $15 - \frac{5x}{8} = 11 + \frac{3x}{8}$

16. A fruit shop sells 20 red apples at a profit of \$8 each, and 30 green apples at a loss of \$3 each. Find the average profit per apple.

A. \$1.4

B. \$2.5

C. \$5

D. \$8

17. A baker sold a total of 128 pieces of cookies. The number of chocolate cookies sold was three times the number of blueberry cookies sold. Find the number of chocolate cookies sold.

A. 28

B. 32

C. 96

D. 40

18. The product of three consecutive even numbers is 480 and x is the largest number. Which of the following equation is correct?

A. $x + (x - 1) + (x - 2) = 480$

B. $x + (x - 2) + (x - 4) = 480$

C. $x(x - 1)(x - 2) = 480$

D. $x(x - 2)(x - 4) = 480$

END OF SECTION A

Section B: Conventional Questions (64 marks)

1. Evaluate the following expressions.

(a) $-10+15\div(3+2)$

(b) $1-(-5)^2+(-5^2)$

(c) $(+4)-[(-7)-(-3)\times(+6)]$

(d) $\dfrac{(+16)(-3)}{-4+3}\times\left(-1-\dfrac{3}{4}\right)$

(e) $11\dfrac{2}{3}\times\left(-\dfrac{7}{16}\right)\div\left(-\dfrac{1}{4}-2\dfrac{1}{4}\right)$

(f) $12\div\dfrac{-15+(-66)}{(-2)^2-(-1^2)}$

(18 marks)

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2. Solve the following equations.

(a) $8 + 2(4 + x) = 4x + 17$

(b) $5(y - 2) - 3(2y + 1) = 29$

(c) $\frac{3x-2}{6} = \frac{x}{5}$

(d) $\frac{y}{4} = \frac{3y}{2} - 5$

(e) $\frac{2x+1}{4} = 8 - \frac{x+1}{6}$

(18 marks)

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3. The following shows the change in Linda's bank account balance (in dollars) over the past four months:

1st month	2nd month	3rd month	4th month
−$85	+$40	−$60	+$15

(a) Find the average change in Linda's bank account balance in these four months.

(b) If Linda's balance is $590 at the end of the 4th month, find her balance at the beginning of the 1st month.

(6 marks)

Answers written in the margins will not be marked.

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4. A notebook is \$10 more expensive than a pen. If the price of 15 pens is \$18 less than that of 12 notebooks, by setting up an equation, find the prices of a notebook and a pen respectively.

(7 marks)

Answers written in the margins will not be marked.

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5. (a) (i) Find the prime factorizations of 72, 168 and 252.

(ii) Hence, express the H.C.F. and L.C.M. of 72, 168 and 252 as prime factorizations.

(b) Three high speed trains on different routes depart from the main station at 8:00 a.m. Train A returns to the station every 72 minutes, Train B every 168 minutes, and Train C every 252 minutes. What is the earliest time all three trains will be at the main station again?

(8 marks)

Answers written in the margins will not be marked.

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6. In a 30-question math quiz, the scoring is as follows:

+ 6 marks for a correct answer,

−3 marks for an incorrect answer,

−1 mark for an unanswered question.

Jill's total score was 105. It's given that the number of questions she got wrong was exactly twice the number she didn't answer.

By setting up an equation, find the number of questions that Jill answered correctly.

(7 marks)

END OF PAPER

Answers written in the margins will not be marked.