Chapter 1 – Test *Basic Mathematics*

Name:_____ Class:_____ ( ) /28

Part A (10 marks)

For questions 1 – 5, each question carries two marks. Choose the best answer for each question.

1. Which of the following numbers is NOT a prime number?
   A. 19
   B. 39
   C. 59
   D. 79 ☐

2. How many prime factors does 77 have?
   A. 1.
   B. 2.
   C. 3.
   D. 4. ☐

3. $48 \div [(12-6) \times 4] =$
   A. 2
   B. 8
   C. 16
   D. 32 ☐

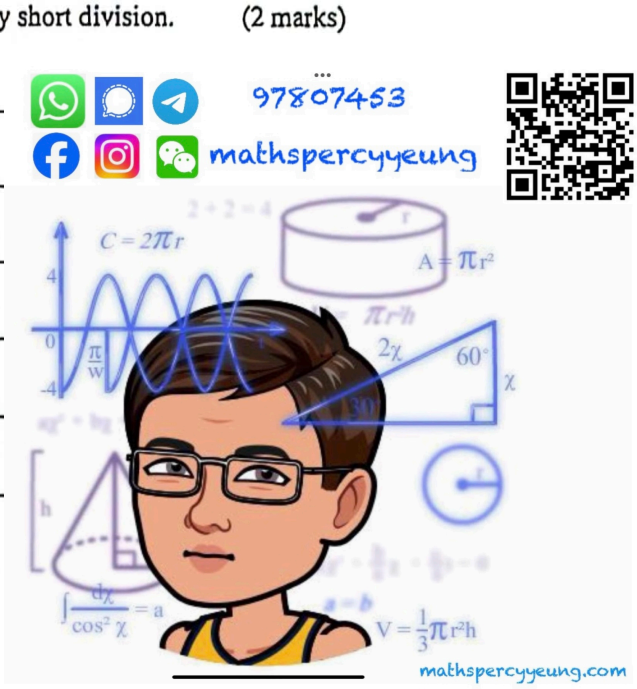
4. 3507● is a 5-digit number. If the number is divisible by 8, find the value of ●.
   A. 0
   B. 2
   C. 4
   D. 6 ☐

5. The H.C.F. of an expression and $11^4 \times 13^3 \times 17^4$ is $11^2 \times 13^3 \times 17^2$. The expression may be
   A. $11^2 \times 13^3 \times 17^2$.
   B. $11^4 \times 13^2 \times 17$.
   C. $11^2 \times 13^2 \times 17^2$.
   D. $11^3 \times 13 \times 17^2$. ☐

Part B (18 marks)

(Write your answers in the space provided.)

6. Express 56 as a product of prime factors in index notation by short division. (2 marks)



7. Find the H.C.F. of 18, 24 and 48 by short division. (3 marks)

8. Find the L.C.M. of 9, 21 and 36 by prime factorization. (3 marks)

9. Find the value of each of the following expressions. (2 + 3 marks)

(a) $43-[21-(12-5)]$

(b) $\left(3-1\frac{2}{5}\right)\times 1\frac{9}{16}$

10. Find the value of each of the following expressions. (2 + 3 marks)

(a) $4.32 \times (7.1 + 3.4)$

(b) $\left(5.15 + \frac{3}{4}\right) \times 2.1$

Bonus Question

11. The soldiers in a military camp can be divided into groups of 12, 15 or 20. Can the number of soldiers in the military camp be 120? Explain your answer. (3 marks)

~ End of test ~