S1 Mathematics Ch1 – Revision Exercise

Section A: Multiple-Choice Questions

1. Which of the following is/are true?
   I. The sum of two negative numbers must be negative.
   II. The product of two negative numbers may be negative.
   III. The difference between two negative numbers may be positive.
   A. I only B. I and II only C. I and III only D. I, II and III

2. Find the sum of the L.C.M and H.C.F. of 24, 42 and 60.
   A. 840 B. 846 C. 1680 D. 1686

3. Which of the following is correct?
   A. $20-(7-2)=20-7-2$ C. $50-10-5=50-(10-5)$
   B. $20-[(-7)+(-2)]=20+7-2$ D $38-(-5+4)=38+5-4$

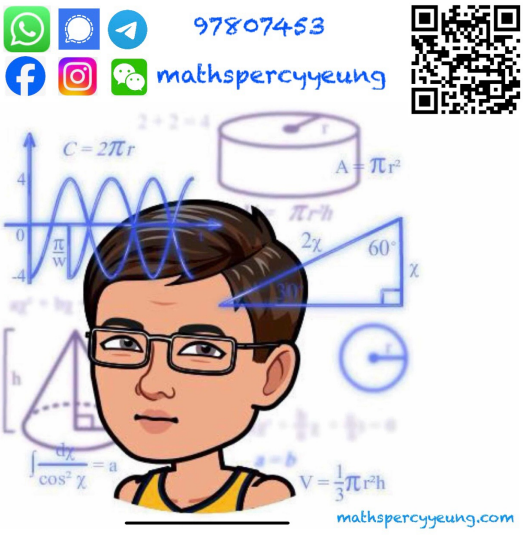
4. When 165 and 203 are divided by n, the remainders are and 5 respectively. Find the possible number of values of n.
   A. 3 B. 4 C. 5 D. 6

5. Which of the following is a pair/are pairs of UNLIKE terms?
   I. $2b, -\frac{b}{3}$ II. $6a, \frac{6}{a}$ III. $3c^2, 2c^3$
   A. I only B. I and II only C. II and III only D. I, II and III

Section B: Conventional Questions

1. Calculate $3-2^4+(-5)^2-4\times(-3)^2$.

2. Solve the equation $\frac{x-2}{6}-\frac{3}{8}(x+2)=2+\frac{x+4}{6}$.



3. Mary has some identical rectangular pieces of paper measuring 20 cm by 36 cm. If she puts the papers together without overlapping to form a square, find the least number of papers that are needed.

4. Amy poured some water at 25°C into a container. She then put the container into a refrigerator to make ice. The temperature inside the refrigerator was kept at –12°C, and the temperature of water dropped by 3°C every hour in the refrigerator. If x hours (x is an integer) is needed for the water in the container to reach –12°C, find the smallest value of x.

5. Two years ago from now, the sum of the ages of Amy and Jenny was 53. 10 years later from now, Amy's age will be $\frac{5}{6}$ of Jenny's. How old is Amy now?

6. Eric and Ken are running along the same track in the same direction. Their starting points were 1 km apart with Ken being in the front. They started running together and they met after 15 min. It is known that Eric's running speed was 16 km/h. Find the running speed of Ken.