

## P4 ISMC Sample Questions

### Section A:

Each of the questions 1 to 2 carries 2 marks.

Each of the questions 3 to 4 carries 3 marks.

1.

Write 24.24 as a mixed number, reduced to its lowest term.

A.  $24\frac{6}{25}$

B.  $24\frac{12}{50}$

C.  $24\frac{24}{10}$

D.  $24\frac{24}{100}$

E.  $\frac{24}{100}$

2.

Which of the following are two common factors of 27 and 72?

A. 1 and 27

B. 2 and 7

C. 3 and 9

D. 27 and 48

E. 144 and 288

3.

Baker Mia baked a carrot cake. Right after that, she baked a fruit cake. She took 50 min to finish baking the carrot cake. She took 15 min longer to finish baking the fruit cake. What time did she start baking if she finished at 4.25 p.m.?

- A. 2.20 p.m.
- B. 2.30 p.m.
- C. 3.10 p.m.
- D. 3.20 p.m.
- E. 3.30 p.m.

4.

When the length and width of a rectangle are both doubled, which of the following statements about the area and perimeter is true?

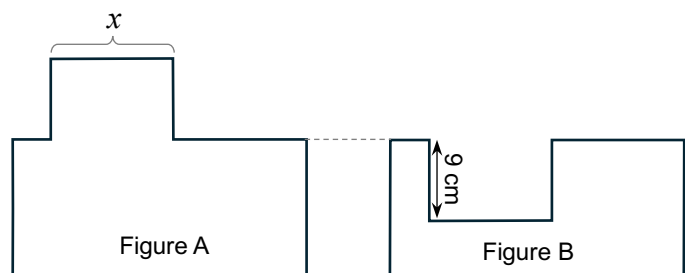
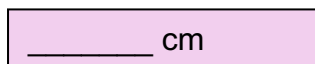
- A. The area and the perimeter are both doubled.
- B. The area and the perimeter both become 4 times as much.
- C. The area is doubled, and the perimeter becomes 4 times as much.
- D. The area becomes 4 times as much and the perimeter is doubled.
- E. The area becomes 4 times as much but the perimeter remains the same.

### **Section B**

Each of the questions 5 to 7 carries 4 marks.

5.

The perimeter of Figure A is equal to the perimeter of Figure B. The area of Figure A is  $1220 \text{ cm}^2$  and the area of Figure B is  $896 \text{ cm}^2$ . What is the length of  $x$ ?



6.

Mother had a bag of rice. She prepared an equal amount of rice for lunch and for dinner for each day. At the end of the second day, she had  $\frac{4}{5}$  of her bag of rice left. At the end of the eighth day, she had

1 kg of rice left. How much rice does she use for lunch each day?

(Give your answer in g.)

\_\_\_\_\_ g

7.

Siti and Muna meet each other at the market regularly.

Siti goes to the market every 2 days and Muna goes to the market every 3 days.

Both of them met at the market 6 times in January.

What was the date of the last time they met at the market in February?

\_\_\_\_ - \_\_\_\_

**Section C**

Each of the questions 8 to 9 carries 4 marks.

Each of the questions 10 to 12 carries 5 marks.

8.

There was a total of 232 apples, oranges and pears selling at a fruit stall.

After  $\frac{7}{8}$  of the apples,  $\frac{3}{4}$  of the oranges and  $\frac{3}{5}$  of the pears were sold, there was an equal number of each of these three fruits left. How many pears were there in the stall at first?

pears

9.

Each of the letters in the multiplication below represents a different digit.

What is the 4-digit answer represented by CEEB in the multiplication shown?

$$\begin{array}{r}
 \phantom{00} \phantom{0} \boxed{A} \boxed{B} \\
 \phantom{00} \phantom{0} \times \phantom{0} \boxed{A} \boxed{B} \\
 \hline
 \phantom{00} \phantom{0} \boxed{C} \boxed{D} \boxed{B} \\
 + \phantom{00} \boxed{E} \boxed{F} 4 \\
 \hline
 \phantom{00} \boxed{C} \boxed{E} \boxed{E} \boxed{B}
 \end{array}$$

10.

Allen, Beth, Cleo and Dion sat for a Math competition paper.

Allen took 45 minutes to complete the paper.

Beth took a little longer than Allen.




Cleo took the total amount of time that Allen and Beth took.

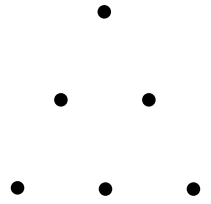
If the total amount of time taken by all four of them was 3 hours 50 minutes, rounded to the nearest 10 minutes, what was the longest possible time that Dion could have taken?

minutes

11.

A triangle can only be drawn such that each corner touches a dot.  
How many triangles in different positions can be drawn altogether?

(Examples of triangles:  and  and  are 3 such triangles)



12.

Mr and Mrs Choi and their children are sharing a packet of jellybeans.  
If each of them took 8 jellybeans, there would be 4 jellybeans left over.  
There would be 3 jellybeans short for each to take 9 jellybeans.  
How many children do Mr and Mrs Choi have?

 children

## **P4 ISMC Sample Questions Answers**

### **Section A:**

Each of the questions 1 to 2 carries 2 marks.

Each of the questions 3 to 4 carries 3 marks.

1. **A**
2. **C**
3. **B**
4. **D**

### **Section B**

Each of the questions 5 to 7 carries 4 marks.

5. **18 cm**
6. **250 g**
7. **24 Feb**

### **Section C**

Each of the questions 8 to 9 carries 4 marks.

Each of the questions 10 to 12 carries 5 marks.

8. **40 pears**
9. **2116**
10. **52 min**
11. **17 triangles**
12. **5 children**