PAPER 1 Booklet A

Questions 1 to 10 carry 1 mark each. Questions 11 to 20 carry 2 marks each. For each question, four options are given. One of them is the correct answer. Make your choice and shade your answer (1, 2, 3 or 4) in the Optical Answer Sheet.

(30 Marks)

1. What is the value of the digit 8 in 34.85?
   (1) 8 tens
   (2) 8 ones
   (3) 8 tenths
   (4) 8 hundredths

2. Which one of the following numbers when rounded off to the nearest ten is 5800?
   (1) 5 789
   (2) 5 795
   (3) 5 806
   (4) 5 850

3. 1000 more than 49 378 is ____________.
   (1) 48 378
   (2) 49 478
   (3) 50 378
   (4) 59 378

(Go on to the next page)
4. Look at the figure below.

What is the length of the ballpoint pen?

(1) 9.6 cm  
(2) 10.4 cm  
(3) 11.6 cm  
(4) 12.4 cm

5. The figure below is made up of unit squares.

What fraction of the whole figure is shaded?

(1) \(\frac{1}{2}\)  
(2) \(\frac{1}{3}\)  
(3) \(\frac{2}{3}\)  
(4) \(\frac{4}{11}\)
6. In the grid below, which line is parallel to BC?

(1) AD
(2) BF
(3) CE
(4) EF

7. The clock below shows the time John’s piano lesson ended in the afternoon.

If his piano lesson lasted 45 minutes, what time did it start?

(1) 11.50 a.m.
(2) 12.35 p.m.
(3) 1.20 p.m.
(4) 11.50 p.m.
8 The average mass of Haziq and his 3 friends is 48 kg. What is their total mass?
(1) 12 kg
(2) 16 kg
(3) 144 kg
(4) 192 kg

9 Express \( \frac{14}{25} \) as a percentage.
(1) 14%
(2) 25%
(3) 56%
(4) 70%

10 A machine can print 2240 brochures in 20 minutes.
On average, how many brochures can it print in 5 minutes?
(1) 112
(2) 448
(3) 560
(4) 11 200

11 Mrs Ng bought an equal number of cupcakes and doughnuts from a bakery.
She paid a total of $63. How many doughnuts did she buy altogether?
(1) 12
(2) 18
(3) 36
(4) 63

(Cupcakes: 2 for $5  
Doughnuts: 3 for $3)
12 In the figure below, not drawn to scale, AD, BE and FC are straight lines.

Find $\angle z$.

![Diagram](image)

(1) 35°  
(2) 55°  
(3) 65°  
(4) 90°

13 The table below shows the number of pupils in a class who wear spectacles and those who do not.

<table>
<thead>
<tr>
<th></th>
<th>Number of pupils who wear spectacles</th>
<th>Number of pupils who do not wear spectacles</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td>14</td>
<td>7</td>
<td>21</td>
</tr>
<tr>
<td>Girls</td>
<td>?</td>
<td>8</td>
<td>?</td>
</tr>
</tbody>
</table>

If there are 40 pupils in the class, how many girls wear spectacles?

(1) 8  
(2) 11  
(3) 14  
(4) 19
14 The figure below shows a square and a rectangle with the same area.
What is the length of Square ABCD?

- (1) 8 cm
- (2) 16 cm
- (3) 32 cm
- (4) 64 cm

15 The figure below shows a square carpet of side 4 m.
Find the area of the unshaded part.

- (1) 6 m²
- (2) 10 m²
- (3) 12 m²
- (4) 16 m²

16 The figure below shows a cuboid. The shaded face is a square of side 6 cm.
Find the volume of the cuboid.

- (1) 120 cm³
- (2) 480 cm³
- (3) 720 cm³
- (4) 2400 cm³
The pie chart below shows the amount of money collected by a bookstore in a week. Use it to answer Questions 17 and 18.

17 What percentage of the total amount of money collected was from the total sale of stationery, magazines and books?

(1) 25%
(2) 50%
(3) 75%
(4) 100%

18 How much money was collected from the sale of books?

(1) $370
(2) $380
(3) $500
(4) $620
19  A jug contained 2ℓ of orange juice. Fiona poured all the juice equally into 8 glasses. How much orange juice was there in each glass?

(1)  0.25ℓ 
(2)  16ℓ 
(3)  250ℓ 
(4)  4ℓ 

20  Siti has 87 stamps. She has thrice as many stamps as Weixin. How many stamps do the 2 girls have in all?

(1)  29 
(2)  116 
(3)  261 
(4)  348 

(Go on to Booklet B)
21  Arrange the following numbers in **increasing** order:

\[
\frac{8}{3}, \quad \frac{3}{8}, \quad 3 \frac{1}{8}, \quad \frac{3}{4}
\]

Ans: ____________, ____________, ____________, ____________

22  Find the value of

(a) \(0.07 \times 7\)

(b) \(76 \div 5\)

Give your answers as a fraction in its simplest form.

Ans: (a) _____________________

(b) _____________________

23  WXYZ is a rectangle. If \(YP = YZ\), find \(\angle b\).

![Diagram of WXYZ rectangle]

Ans: _________________°

(Go on to the next page)
24. The graph below shows the number of books read by Kathy over a few months.

What was the total number of books Kathy read from July to October?

Ans: _____________________

25. The solid below is made up of unit cubes. What is the least number of cubes to be added to the solid in order to form a cuboid measuring 5 units by 2 units by 2 units?

Ans: _____________________

26. What is $\frac{1}{4}$ of 0.58 km? Give your answer in metres.

Ans: _____________________ m
27. In the grid below, draw a triangle XYZ with XY = 3 units and XZ = 9 units. 
\[ \angle YXZ \text{ is } 90^\circ. \text{ Side } XY \text{ has already been drawn for you.} \]

28. Soy Goodness is having a special promotion during the Great Singapore Sale (GSS).

**Usual Price:**
1 bottle of soya milk \( \rightarrow \$2 \)

**Special Offer:**
Buy 3 bottles of soya milk and buy the 4th bottle at **HALF PRICE**.

What is the greatest number of bottles of soya milk Hartika can buy with $30?

Ans: _____________________

29. The sum of the smallest and the greatest factors of a whole number is 28. This number has a total of 4 factors and one of its factors is 3. What is this number?

Ans: _____________________

(Go on to the next page)
30  The figure below is made up of 2 similar equilateral triangles and 2 squares. Find the perimeter of the figure.

Ans: __________________ cm
1 What is the sum of the first 3 multiples of 7?

Ans: _____________________

2 Mr Gurmit wanted to distribute $7000 equally among his 25 workers as a special bonus. How much money would each worker receive?

Ans: $ ___________________

3 The perimeter of the right-angled triangle below, not drawn to scale, is 48 cm. Find its area.

Ans: _________________ cm²
4 A box is 298 g heavier than 5 similar jugs. The mass of the box is 2.5 kg. What is the mass of each jug in grams?

Ans: ___________________ g

5 A cone was placed at the start of a 3-km long path. Thereafter, a cone was placed at every \( \frac{1}{3} \) km interval till the end of the path. How many cones are placed along the path altogether?

Ans: ____________________

6 Juriah had $3. She spent $1.35 and gave 75¢ to her brother. What fraction of her money had she left? Give your answer in the simplest form.

Ans: ____________________

(Go on to the next page)
7  The price list below has been vandalized such that price of the air fryer cannot be seen. The average price of all 4 items is $214.50. What is the price of the air fryer?

<table>
<thead>
<tr>
<th>Price List</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microwave oven</td>
</tr>
<tr>
<td>Toaster</td>
</tr>
<tr>
<td>Air fryer</td>
</tr>
<tr>
<td>Blender</td>
</tr>
</tbody>
</table>

Ans: $____________________

8  Lily read \( \frac{5}{7} \) of a storybook last week. She read the remaining 210 pages this week. What was the total number of pages in the storybook?

Ans: ____________________

(Go on to the next page)
9 In the figure below, not drawn to scale, \( \angle SOU = \angle TOU \). Find \( \angle SOU \).

Ans: \__________________________\(^\circ\)

10 Last year, Mr Chua's mass was 65 kg. This year, his mass increases by 8%. What is his mass this year?

Ans: \__________________________\ kg
11 The bar graph below shows the number of pupils who join the various CCAs.

(a) Which CCA is the least popular?

(b) What is the average number of girls who join Band, Choir and Handbell?

Ans: (a) ____________________ (1)

(b) ____________________ (2)

(30 Marks)
12 A group of 39 volunteers had been given an equal number of eggs to paint for an Easter event. When 1 of them fell sick, his eggs were redistributed among the rest of the volunteers who had to paint 4 more eggs each.

(a) How many eggs were given to each volunteer at first?
(b) How many eggs did they have to paint altogether?

Ans: (a) ________________ (1)
     (b) ________________ (2)

13 Mr Chandra bought a mobile phone during the sale.

Usual Price: $1060
Discount: 15% off usual price

(a) How much was the discount given?
(b) 7% GST was charged on the discounted price. How much did he pay for the phone after adding GST?

Ans: (a) ________________ (1)
     (b) ________________ (2)

(Go on to the next page)
The diagram below shows a rectangular field PQRS. A square of side 7 m is then made into a garden. The area of the remaining field PQTU is 273 m$^2$.

(a) What is the length of QT?
(b) What is the area of the rectangular field PQRS?

Ans: (a) ____________________ (1)
(b) ____________________ (2)
Shaun wanted to buy 21 mangoes. He compared the prices of 2 different fruit stalls.

**Stall A**
1 for $2.30
Buy 3 and enjoy a discount of $0.15 per mango

**Stall B**
1 for $3.20
Buy 2 and get 1 free

(a) How much would Shaun spend in all if he bought the mangoes only from Stall A?

(b) How much would he save altogether if he bought the mangoes from Stall B instead of Stall A?

Ans: (a) ____________________ (2)

(b) ____________________ (2)
Mrs Ho bought some stickers. She gave \( \frac{4}{5} \) of the stickers to her students. She shared \( \frac{1}{3} \) of the remaining stickers equally among her 3 friends and had 246 stickers left.

(a) How many stickers did each friend get?
(b) How many stickers did Mrs Ho buy altogether?

Ans: (a) ____________________ (2)
(b) ____________________ (2)
17 In the figure below, a rectangular tank, 35 cm long, 36 cm wide and 40 cm high, was \( \frac{3}{4} \) filled with water. Ken poured some water from the tank to fill an empty cubical container of side 20 cm completely.

(a) What was the volume of water in the rectangular tank at first?
(b) How much water was left in the tank after the container was filled completely? Express your answer in litres and millilitres.

Ans: (a) ____________________ (2)
(b) ____________________ (3)

(Go on to the next page)
The following figures show triangles which are drawn using dots and lines. The length of each side of the triangle is 4 cm.

<table>
<thead>
<tr>
<th>Pattern</th>
<th>Number of dots</th>
<th>Perimeter</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
<td>12 cm</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td>16 cm</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
<td>20 cm</td>
</tr>
<tr>
<td>4</td>
<td>6</td>
<td>(a)(i) _______________</td>
</tr>
<tr>
<td>...</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>7</td>
<td>(a)(ii) _______________</td>
<td>36 cm</td>
</tr>
</tbody>
</table>

(a) Complete the table above for Pattern 4 and Pattern 7.  
(b) Which pattern has 15 dots?  
(c) Which pattern has a perimeter of 72 cm?

Ans:  (b) ____________________ (1)  
      (c) ____________________ (2)