Singa

# Singa Math Assessment Test 2022 

## For Grades 3/4

Time: 45 minutes

## NAME:

GRADE:

## COUNTRY:

## INSTRUCTIONS

1. Please DO NOT OPEN the contest booklet until the Proctor has given permission.
2. There are 25 questions.

Section A: Questions 1 to 20 score 2 marks each, no points are deducted for unanswered or wrong answer.
Section B: Questions 21 to 25 score 2 marks each, no points are deducted for unanswered or wrong answer.
3. Shade your answers neatly using a 2B pencil in the Answer Entry Sheet.
4. PROCTORING: No one may help any student in any way during the contest.
5. No electronic devices capable of storing and displaying visual information is allowed during the course of the exam. Strictly No Calculators are allowed into the exam.
6. Students must show detailed working and transfer answers to the Answer Entry Sheet.
7. No exam papers and written notes can be taken out by any contestant.

## Section A: Multiple Choice Questions ( $20 \times 2$ marks $=40$ marks)

For questions 1 to 20, choose the correct option and write its number (1, 2, 3 or 4 ) in the brackets provided. Then shade your option in the Answer Entry Sheet (AES) sheet provided.

1. How many digit ' 7 ' appear in numbers from 700 to 1000 ?
(1) 130
(2) 138
(3) 143
(4) 160
2. Lorraine had two pieces of string. One piece of string was 64 cm long and the other piece of string was 56 cm long. She wanted to cut the two pieces of string into smaller pieces of equal length without any remainder. What was the longest possible length of string she could cut each piece into?
(1) 8 cm
(2) 2 cm
(3) 16 cm
(4) 4 cm
3. A belt and a watch cost $\$ 630$. A tie costs twice as much as the belt. The watch costs twice as much as the tie. Find the difference between the cost of the watch and the tie.
(1) $\$ 180$
(2) $\$ 252$
(3) $\$ 270$
(4) $\$ 360$
4. A machine produced the same number of toy robots every day from Monday to Wednesday. It produced 192 toy robots each on Thursday and on Friday. It produced a total of 1104 robots from Monday to Friday. How many toy robots did the machine produce on Monday?
(1) 720
(2) 304
(3) 240
(4) 176
5. Which of the following is exactly between $\frac{3}{4}$ and $1 \frac{5}{12}$ ?
(1) $1 \frac{4}{8}$
(2) $\frac{18}{12}$
(3) $\frac{8}{12}$
(4) $\frac{13}{12}$
6. A florist had 735 flowers. 85 flowers have wilted and had to be thrown away. $\frac{4}{5}$ of the remaining flowers were then sold at $\$ 2$ each. How much did the florist collect from selling the flowers?
(1) $\$ 130$
(2) $\$ 520$
(3) $\$ 650$
(4) $\$ 1040$
7. What digits do the letters $P$ and $Q$ represent?

$$
\begin{array}{r}
87 . \mathrm{P} 1 \\
-\quad 7 \mathbf{Q . 3 2} \\
\hline 8.89
\end{array}
$$

(1) $P=2, Q=9$
(2) $P=1, Q=8$
(3) $\quad P=2, Q=8$
(4) $P=1, Q=9$
8. John has two stacks of identical cups as shown. The height of the stack of 3 cups is 20.8 cm . The height of the stack of 9 cups is 35.5 cm . Find the height of 1 cup.

(1) 2.45 cm
(2) 4.9 cm
(3) 15.9 cm
(4) 18.35 cm
9. When it was 1320 on Monday in Singapore, it was 0620 on Monday in United Kingdom. At 0545 on Tuesday in Singapore, Mr Wong made a call to United Kingdom. He spoke on the phone for 20 minutes. What time and day would it be in United Kingdom when he finished his phone call? (Note: 1300 means 1p.m)
(1) 11.05 p.m. on Monday
(2) 11.05 p.m. on Tuesday
(3) 1.05 p.m. on Monday
(4) 1.05 p.m. on Tuesday
10. Joseph wants to cut $4-\mathrm{cm}$ squares from a rectangular piece of paper that has length 98 cm and breadth 74 cm . Find the greatest number of $4-\mathrm{cm}$ squares that Joseph can cut from the piece of paper.
(1) 168
(2) 432
(3) 453
(4) 1813
11. Mei Ling draws a rectangle STUV. The area of rectangle STUV is $36 \mathrm{~cm}^{2}$. ST is 4 times as long as SV. What is the perimeter of rectangle STUV?

(1) 10 cm
(2) 20 cm
(3) 30 cm
(4) 40 cm
12. The figure is made up of a square and a rectangle. All the marked angles meet at point $A$. Find $\angle k$. (The figure is not drawn to scale.)

(1) $52^{\circ}$
(2) $38^{\circ}$
(3) $33^{\circ}$
(4) $14^{\circ}$
13. A rectangular piece of paper is folded as shown. Find $\angle t$. (The figure is not drawn to scale.)

(1) $128^{\circ}$
(2) $64^{\circ}$
(3) $38^{\circ}$
(4) $19^{\circ}$
14. Identify the figure(s) that is/are symmetric.


A


B


C


D
(1) A and C
(2) A, C and D
(3) A, B and C
(4) A, B, C and D
15. Kitchen towels are sold at the following prices in a supermarket.


Mdm Goh bought some kitchen towels and paid \$56.50 at promotional price. If she had paid at the original price for each kitchen towel, how much more would she have to pay?
(1) $\$ 2.70$
(2) $\$ 5.10$
(3) $\$ 59.20$
(4) $\$ 61.60$
16. Water was drained from a container from 2 taps, Tap $X$ and Tap $Y$. Water was first drained from Tap X. After 6 minutes, Tap Y was turned on to drain the water together with Tap X. Both taps were then turned off at the same time after a period of time. The graph below shows the amount of water in the container over 12 minutes. In one minute, how many litres of water were drained out from Tap Y?

(1) 15 litres
(2) 12 litres
(3) 3 litres
(4) 4 litres
17. Containers $A$ and $B$ had the same amount of liquid at first. When 495 ml of the liquid was poured from container $A$ to container $B$, container $A$ contained $\frac{3}{8}$ as much liquid as container B. How much liquid was in container A at first?
(1) 1089 ml
(2) 792 ml
(3) 765 ml
(4) 630 ml
18. What is the 4th number of Row 16 in the following number sequence?

| Row 1: | 1 |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Row 2: | 2 | 3 | 4 |  |  |  |  |
| Row 3: | 5 | 6 | 7 | 8 | 9 |  |  |
| Row 4: | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| : | $:$ |  |  |  |  |  |  |
| Row 16: | $x$ | $x$ | $x$ | $?$ | $\ldots$. |  |  |

(1) 131
(2) 142
(3) 210
(4) 229
19. Lamp posts were placed around the whole field at an equal distance. The field had a length of 110 m and a breadth of 70 m . The distance between the $1^{\text {st }}$ and $5^{\text {th }}$ lamp post was 40 m . How many lamp posts were there altogether?


Figure 1


Figure 2
(1) 45
(2) 40
(3) 36
(4) 18
20. Rectangle ABCD is made up of 4 identical rectangles. Two of the rectangles are divided into 4 identical squares. One of the rectangles is divided into 2 identical triangles. What fraction of Rectangle ABCD is unshaded?

(1) $\frac{2}{3}$
(2) $\frac{3}{4}$
(3) $\frac{3}{8}$
(4) $\frac{5}{8}$

## Section B: 5 Open-ended Questions ( $5 \times 2$ marks $=10$ marks)

Read the questions carefully. For questions 21 to 25 , show your working clearly and write your answer in the blank provided. Then write and shade your answer in the Answer Entry Sheet (AES) sheet provided.
21. The sum of 5 numbers in the boxes is 95 .

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| --- | --- | - | --- | --- | --- | -- |
| --- | --- | --- | --- | --- | --- | --- |

Which is the largest number in the set when the sum is $260 ?$

Answer: $\qquad$
22. The figure below is made up of 2 identical squares and 6 identical rectangles. The perimeter of the figure is 220 cm . Find the area of each square.


Answer: $\qquad$ $\mathrm{cm}^{2}$
23. A rectangular field measuring 25 m by 18 m has a $3-\mathrm{m}$ wide pavement cutting across it. Find the area of the field not covered by the pavement.

$\qquad$ $\mathrm{m}^{2}$
24. A repeated pattern is formed using the numbers $7,8,9$ and 0 .

The first 20 numbers are shown below. What is the sum of the first 100 numbers?

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8
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Answer: $\qquad$
25. Florence, Nellie and Yvonne had $\$ 630$ altogether. Florence spent $\frac{1}{3}$ of her money. Nellie spent $\$ 45$ and Yvonne spent twice the amount that Florence spent. In the end, all three girls had the same amount of money left. How much money did Nellie have at first?

Answer: \$ $\qquad$

