Kangaroo.Study
GEP Selection
MOCK EXAM 2024

Subject: Maths

Total Duration: 1 hour 35 minutes

Name:_____

INSTRUCTIONS TO PUPILS

1. Do not turn over this page until you are told to do so.

2. Follow all instructions carefully.

3. Q1-Q24: choose the correct answer.

4. Q25-Q41: write your answer.

1. Given $\dfrac{7}{A} = \dfrac{3}{18}$, what is the value of A?

(1) 22   (2) 27   (3) 32   (4) 37   (5) 42

2. 100 days after today is Saturday. What day of the week is today?
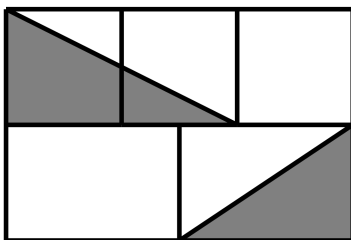(1) Monday   (2) Tuesday   (3) Wednesday   (4) Thursday
(5) Friday

3. Each pie costs $5, each bun costs $3. Tom bought 4 more pies than buns. Which of the following money is not possibly paid?
(1) $44   (2) $48   (3) $52   (4) $60   (5) $68

4. Lim Ki got sweets. He gives every friend 6, left 6. He gives every friend 9, one friend did not get any. How many friends does he have?
(1) 1   (2) 2   (3) 3   (4) 4   (5) 5

5. What is the shaded fraction in the figure below?

(1) $\dfrac{2}{5}$ (2) $\dfrac{7}{12}$ (3) $\dfrac{7}{24}$ (4) $\dfrac{1}{6}$ (5) $\dfrac{1}{8}$

6. B is 70m behind D, A is 90m behind D, A is 50m behind C. What is the distance between B and C.
(1) 30m   (2) 40m   (3) 50m   (4) 80m   (5) 70m

7. Two ants are at a distance apart. Ant A can walk 3 cm every time ant B walks 2 cm. If ant B walks 12 cm to meet ant A (A is also walking), what is the distance between them at first?

(1) 5cm   (2) 6cm   (3) 18cm   (4) 24cm   (5) 30cm

8. There are some mangoes and peaches. The number of mangoes and peaches are equal. After $\frac{1}{2}$ peaches and $\frac{3}{4}$ mangoes are eaten, what fraction of peaches are left of the remaining fruits?

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

9. Jia Ming has an equal amount of red and blue marbles. He wants to pack them equally into 2 boxes. There are 24 red marbles in total. How many blue marbles are there in box 1?
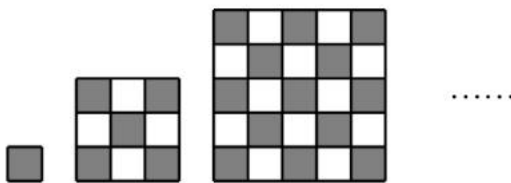
	Red marbles			
Box 1	/	/		
Box 2	/	/	/	/
"/" represents the same number of marbles				

(1) 24   (2) 8   (3) 16   (4) 12   (5) 48

10. Jug A can hold 50 ml more than jug B. When jug A is full, it can fill 3 cups and have 300 ml left. When jug B is full, it can fill 2 cups and have 800 ml left. What is the volume of a cup?

(1)　350ml　　(2)　450ml　　(3)　550ml　　(4)　650ml　　(5)　750ml

11. How many more shadow squares are there in the ninth picture than in the eighth picture?

(1)　32　　　(2)　28　　　(3)　109　　　(4)　141　　　(5)　36

12. David spends $\frac{2}{5}$ of his money on food. He then spent \$6 on sweets. He now has half his original amount of money left. How much did he have at first?

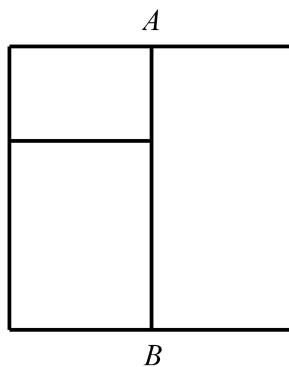(1)　\$10　　(2)　\$12　　(3)　\$18　　(4)　\$30　　(5)　\$60

13. A is 24 kg heavier than B. A is also 30 kg heavier than C. If the sum of A and B weights is equal to three times of C's weight, how heavy is C?

(1)　12kg　　(2)　24kg　　(3)　36kg　　(4)　27kg　　(5)　54kg

14. There are some people at a party. Every 10 people will share a pack of sweets and every 6 people will share a pack of chocolate. If 8 packs of food are eaten in total, how many people are at the party?

(1)   8   (2)   18   (3)   10   (4)   30   (5)   48

15. Before cut, the area of the square is 36 cm², A and B are the midpoint on respective sides, what is the perimeter of the 3 parts altogether after cut?
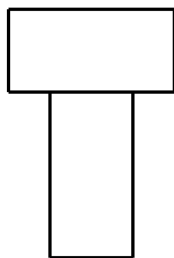

(1)   30cm   (2)   36cm   (3)   42cm   (4)   48cm   (5)   24cm

16. Ahmad is 10 years older than Tom. 2 years later, Ahmad will be twice as old as Tom. How old is Ahmad now?

(1)   8   (2)   10   (3)   18   (4)   20   (5)   28

17. The length of rectangle is 2 times the width. How many times of the width is the perimeter of the figure?

(1) 7   (2) 8   (3) 9   (4) 10   (5) 11

18. $\dfrac{\Theta}{5}+\dfrac{*}{10}=\dfrac{1}{2}$

$\Theta > *$

$\Theta \times * = ?$

(1) 13   (2) 5   (3) 4   (4) 3   (5) 2

19.
△ and □ are whole numbers.
△□ and □△ are 2-digit numbers,
△ is bigger than □
△□÷10, the remainder is 6, □△÷5, the remainder is 4, what is the sum of △ and □?

(1) 7   (2) 10   (3) 13   (4) 15   (5) 16

20. □ is divisible by 5, △ is divisible by 4. Which of the following statements is definitely true?
(1) □ + △ is odd
(2) □×□ is odd
(3) △ + △ is odd
(4) □ + □ + △ is even
(5) □ + △ + △ is even

21. A ship travels at constant speed. The ship arrives at B at 10:50 a.m. and stay for 3 hours. Then the ship goes to port C and arrive at C at 5:20 p.m. on the same day. The journey from port B to C was twice as long as from port A to B. What time did the ship leave port A?

(1) 5:20 a.m.
(2) 5:50 a.m.
(3) 9:05 a.m.
(4) 7:20 a.m.
(5) 9:10 a.m.

22. 22446688......, what is the 105th digit?

(1) 2   (2) 3   (3) 4   (4) 5   (5) 8

23. There are 10 rows of chairs in the hall. Some rows (at least 2 rows) have 8 chairs and the rest have 9 chairs. The chairs are rearranged to rows of 11 chairs. How many rows are there now?

(1) 5   (2) 6   (3) 7   (4) 8   (5) 9

24. 5 children shook hands with each other, a table that shows how many handshakes for each child except E. How many times did E shake hands?

Children	No. of handshakes
A	1
B	2
C	3
D	4
E	

(1) 0   (2) 1   (3) 2   (4) 3   (5) 4
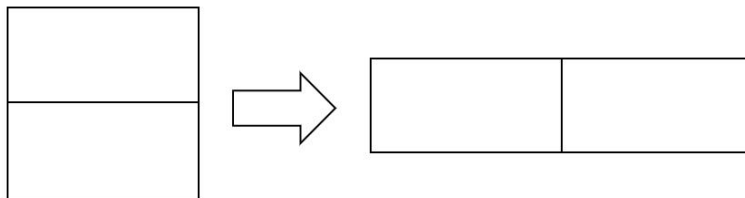
25. Use 1, 2, 3, 4, 5, 6 to form 2 three-digit numbers, and minimize the difference between the two numbers. What is the minimum difference?

26. Alex has $14.90. She has $1.65 more than Ben.
(1) How much does Ben have?
(2) How much do they have altogether?

27. A toy car cost $30 more than the soft toy, and the cost of toy car equals to cost of 3 soft toys, how much does the soft toy cost?

28. Area of the square is 36 cm^2. It is then split into equal halves and rearranged. What is the perimeter of this new figure on the right?

29. A barrel filled with a $\dfrac{1}{4}$ of oil weighs 12 kilograms, and a barrel filled with oil weighs 24 kilograms. What is the weight of an empty barrel?

30. Mary and Andy have same number of stickers. Mary groups stickers in sets of 2. Andy groups stickers in sets of 5. Mary has 9 more sets than Andy. How many stickers do each of them have?

31.

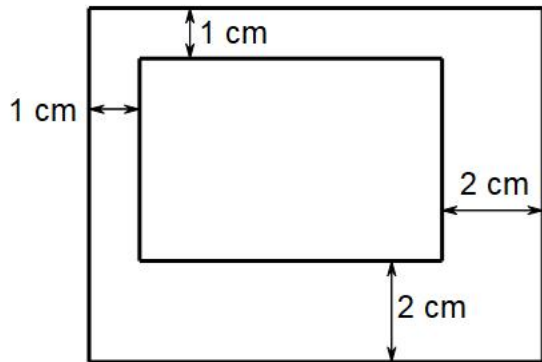| Small pack	Big pack
1 pen + 2 erasers	2 pens + 4 rulers

Twice as many big packs as small packs are sold. If 60 pens sold, how many rulers were sold?

32. $\overline{AB}$ and $\overline{BA}$ are 2-digit numbers. $\overline{AB}$ is divisible by 5. If $\overline{AB-BA}$ is 18, what is $A \times B$?

33. When there are 60 shapes in the bottom row, how many triangles are there?

Top	△△	△	△△	△	……
Bottom	□○○	□○○	□○○	□○○	……

34. Total perimeter of both rectangles is 56 cm. Find the perimeter of the larger rectangle?

35. A and B are 600 m apart. Every 4 meters A walks, B will walk 6 meters. Both starts walking towards each other. When they meet, how far has A travelled?

36. Find the value of the triangle.

37. A=21 cm², B=12 cm², C=14 cm².Find D.

A	B
C	D

38. The sum of any three adjacent numbers is 37. What is the value of A?

11, _____, A, _____, _____, _____, _____, _____, 14, _____,

39. If Karen starts counting from 1 and goes up in threes = 1, 4, 7, … and Anne starts counting at the same time from 101 and goes down in twos at the same ratios = 101, 99, 97, … they will say the same number together. What is that number?

40. Find 2 ways to put the cards into the boxes, 2 each. The number on the boxes represents the difference of the cards that are inside, and each card is only used once. Write down the sum of the 2 cards in box D.

Cards	1	2	3	4	5	6	7	8

Box:	A	B	C	D
Number:	5	3	4	4

41. Fill in 1-9 without repeating in the following figure. Find the **two** different values of "?".

$\square + \square + \square + \square = 22$

$\square \times \square = 24$

$\square + \square + \square = ?$

ANSWER

1-5: 54253
6-10: 15433
11-15: 15343
16-20: 34544
21-24: 3443
25: 47
26: (1) $13.25; (2) $28.15
27: $15
28: 30cm
29: 8kg
30: 30
31: 96
32: 35
33: 30
34: 34cm
35: 240m
36: 5
37: 8cm²
38: 14
39: 61
40: Any two of 6, 8, 10, and 12 are correct
41: 12 or 13