Category I (Grades 3&4)

1. Which of the followings is the smallest three-digit number that can be written with digits: 0, 2, 8? <u>(Digits cannot be repeated)</u>

    A) 802   B) 280   C) 208   D) 28

2. The product of two numbers is 100 and their sum is 29. What is their difference?

    A) 4   B) 10   C) 14   D) 21

3. The student has books on 4 shelves, 7 books on each, and 12 books on the table. How many books does the student have?

    A) 28   B) 40   C) 23   D) 50

4. John is 9 years old. His father Alex is currently 4 times as old as John. How old will Alex be when John is twice as old as he is now?
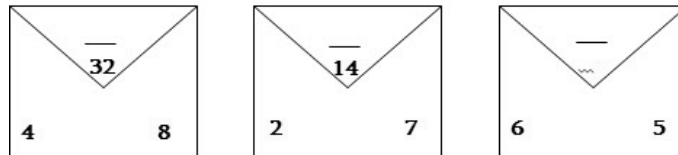
    A) 45   B) 72   C) 36   D) 18

5. What number must be written in the blank to get the correct equation?

    $$\bigcirc + 26 = 10+33$$

    A) 10   B) 17   C) 33   D) 43

6. Determine how numbers are written on envelopes. Fill in the blank on the last envelope in the same way.
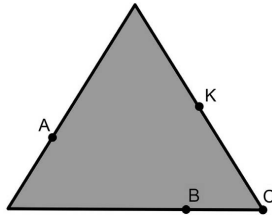

    A) 11   B) 65   C) 50   D) 30

7. Which number is the largest?

    A) $3 \cdot 10\,000 + 3 \cdot 100 + 5 \cdot 10$ B) $2 \cdot 10\,000 + 4 \cdot 100$
    C) $2 \cdot 10\,000 + 3 \cdot 100$ D) $3 \cdot 10\,000 + 4 \cdot 100$

8. Given a triangle, four dots are marked on its sides. Which two points must be joined by a section to divide a given triangle into two triangles?
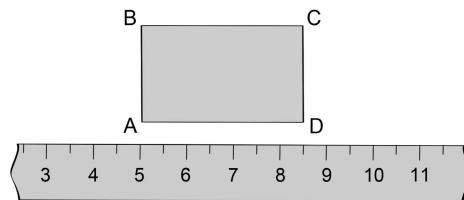

A) A and B   B) K and B   C) A and C   D) K and A

9. The number was first increased by 5, then reduced by 3 times. The result is 16. What number did they come up with?

A) 18   B) 7   C) 43   D) 53

10. Use the drawn ruler to determine the length of the long side of the rectangle.

A) 8cm 5mm   B) 5cm   C) 3cm 5mm   D) 3cm

11. Jane and Jack wrote some three-digit numbers on a piece of paper, but each digit of the written numbers was covered with a blank box. Whose written number is greater?

Jane ---   6 ☐ 7   J a c k ---   6 ☐ 9

A) Jane
B) Jack
C) Numbers are equal
D) Impossible to determine

12. The perimeter of the rectangle is 20 cm. Its length is 6 cm. What is the width of the rectangle?

A) 14   B) 8   C) 7   D) 4

13. Alex wanted to fill in the table so that the sum of the numbers in each row and in each column were equal to each other. He made one mistake. Which number should Alex correct?

9	1	5
3	7	6
4	7	4

   A) 3   B) 1   C) 4   D) 5

14. Which number should be in the rectangle?

$$125 \cdot (137+220) = 125 \cdot 137 + \blacksquare \cdot 220$$

   A) 1   B) 137   C) 125   D) 0

15. A minute ago, there were 20 more people in the room A than in the room B. Then six people from the room A moved to room B. How many more people are there in the room A than in room B now?

   A) 8   B) 3   C) 6   D) 14

16. How many times does the digit "4" appear from 1 to 70?

   A) 14   B) 15   C) 16   D) 17

17. Grandma sent Alex a bag of candies. When Alex opened it, he found inside 8 large boxes of candy. Each of these large boxes had 6 smaller boxes of candy inside, and each of the smaller boxes had 10 candies. How many candy boxes of all sizes were in the bag?

   A) 24   B) 48   C) 56   D) 66

18. A princess is riding a horse. A bird is on her shoulder. The three of them together have how many more legs then heads?

   A) 2   B) 3   C) 4   D) 5

19. Alex can get from home to school in two ways: via AKM or through ABCDM. Which way is longer?
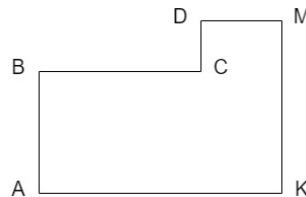
   A) AKM
   B) ABCDM
   C) They are equal
   D) Impossible to determine

20. In the given table, the same number is written under the box of the same color. To the right of each row is the sum of the numbers written in all the boxes in that row. Which number is written under the black (darker) box?

$\rightarrow 34$
$\rightarrow 32$
$\rightarrow 26$
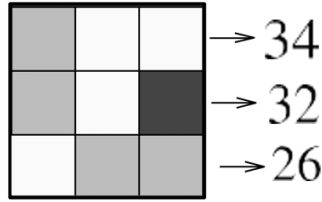
A) 6 B) 8 C) 10 D) 12

21. Alex has 9 coins. His sister has twice as many coins as Alex. How many coins do they have altogether?

A) 9 B) 18 C) 27 D) 36

22. Jane has to arrange the mosaics so that different numbers are written in any two boxes with the same page. Which piece should Jane place on the missing spot?

3	2	5	4	2	1
1	4	3	1	3	4
2	5		5	2	1
4	1				3
3	2	4	2	5	2
4	1	3	1	3	4

A)
4		
1	2	3

B)
2		
4	1	3

C)
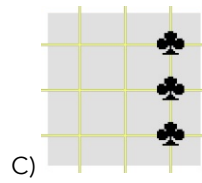| 2		
3	1	4

D)
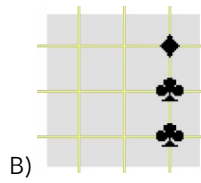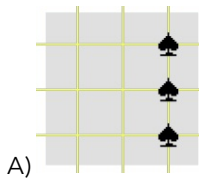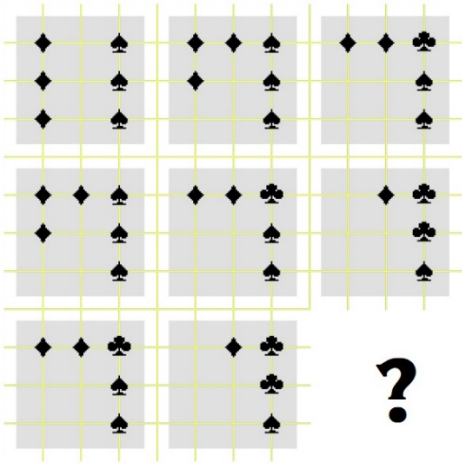| 3		
2	1	4

23.

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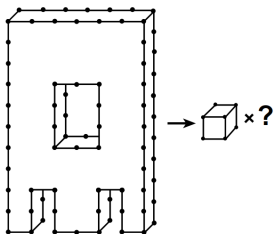
A) 48 B) 50 C) 52 D) 54

24. Find the missing shape.

A)   B)   C)   D)
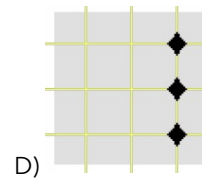
25. Daniela came to a friend in 30 minutes, what time will it take her to come back if she walks three times slower?

A) 10 min   B) 30 min   C) 90 min   D) 27 min