Renert Rabbit Math Contest 2021
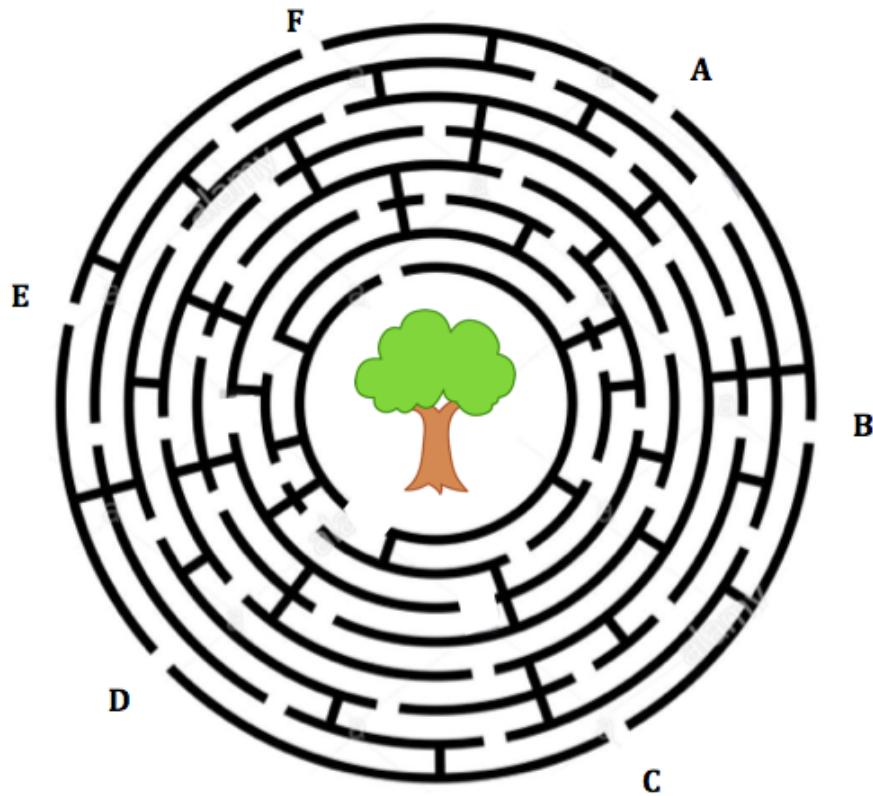
INTELLIGENT LEARNING
RENERT

Instructions:

1. Do not open this booklet until you are told by your teacher to begin.

2. Materials: pencil, paper — no other materials. NO calculators!

3. You will have exactly **45 minutes** to work on the contest.

4. This is a multiple-choice contest. Each question is followed by five possible answers marked A, B, C, D, and E. Only one of the options is correct. After making your choice, circle the correct letter choice.

5. This form has 7 questions in Part A, 7 questions in Part B, and 4 questions in Part C.

6. Scoring:

   - Each correct answer is worth:
     - 3 points in Part A,
     - 4 points in Part B,
     - 6 points in Part C.
   - Each unanswered question is worth 1 point.
   - Incorrect answers are worth 0 points.

Part A (3 points each)

1. If you put the numbers 11, 80, 2, 25, and 20 in order from smallest to biggest, which of the numbers will go in the middle?

   (A) 2   (B) 11   (C) 20   (D) 25   (E) 80

2. Sasha drew a square, 2 triangles, and a rectangle. How many lines did she use to make all of the shapes?

   (A) 11   (B) 12   (C) 13   (D) 14   (E) 15

3. Which starting positions can you use to get to the tree?

   (A) A and B   (B) A and C   (C) Only C   (D) B and E   (E) D and F

4. How many socks do not have a pair?

(A) 2   (B) 3   (C) 4   (D) 5   (E) 6

5. 2 hundreds + 13 tens + 24 ones equals

(A) 39   (B) 212   (C) 237   (D) 354   (E) 21324

6. A classroom has 5 tables. The teacher places 6 chairs at each table and has 4 chairs left over. How many chairs did the teacher have altogether?
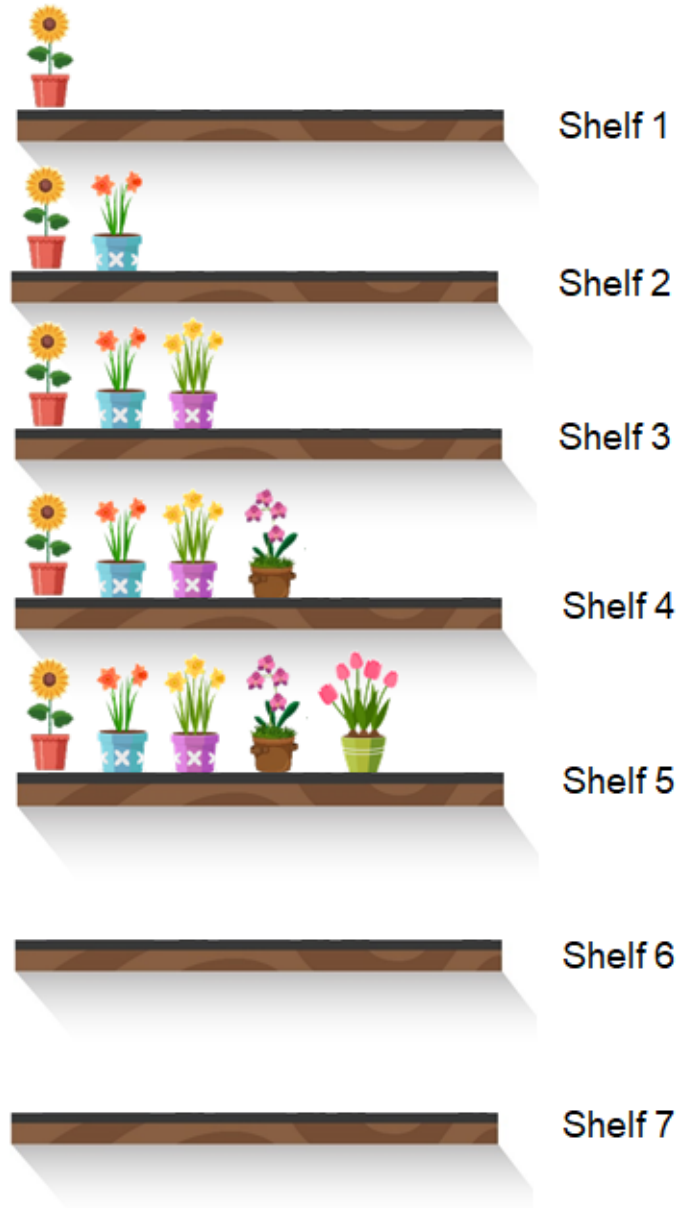

(A) 15   (B) 26   (C) 30   (D) 34   (E) 35

7. Ms. Doina loves flowers and she likes to arrange them on her shelves in the following pattern:

- The top shelf has only one vase with 1 flower
- The second shelf has two vases, one with 1 flower and one with 2 flowers (the pattern continues as shown in the diagram).

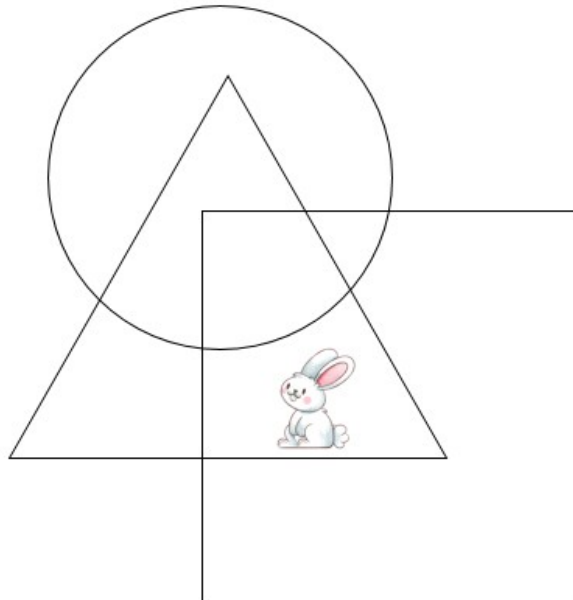How many flowers will there be on shelf 7?

(A) 21   (B) 24   (C) 28   (D) 29   (E) 30

Part B (4 points each)

8. At a pet store, there are 3 black rabbits and twice as many brown rabbits. What is the total number of legs that all of the rabbits have at the pet store?

   (A) 7   (B) 8   (C) 12   (D) 24   (E) 36

9. Where is the rabbit?

   (A) Inside the circle and the triangle but outside the square
   (B) Inside the triangle and the square but outside the circle
   (C) Inside circle and the triangle
   (D) Inside the circle, the triangle, and the square
   (E) Inside the circle and the square but outside the triangle

10. In which of these pairs of numbers is the sum greater than the product?

   (A) 4 and 6   (B) 3 and 2   (C) 5 and 1   (D) 2 and 2   (E) 5 and 3

11. A teacher and her 8 students are walking in a line. Dani is the second last in line. How many students are there between Dani and the student who is right behind the teacher?

(A) 3   (B) 4   (C) 5   (D) 6   (E) 7

12. Emir is 2 years younger than Ethan. How much older than Emir will Ethan be in 5 years?

(A) 2 years   (B) 3 years   (C) 5 years   (D) 7 years   (E) 10 years

13. Cynthia had 7 coins that make up $0.57. She holds 6 coins in her hand: 1 Quarter, 2 Dimes, 1 Nickel, and 2 Pennies. What is the 7th coin?

(A) Penny   (B) Nickel   (C) Dime   (D) Quarter   (E) Loonie

14. $\diamondsuit = ?$

$$\clubsuit + \clubsuit = 14$$
$$\heartsuit + \clubsuit = 11$$
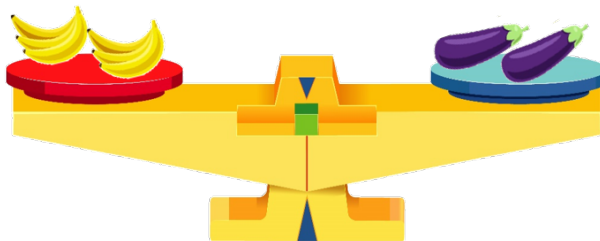$$\heartsuit + \diamondsuit = 18$$

(A) 5   (B) 9   (C) 12   (D) 14   (E) 20

Part C (6 points each)

15. Alice is taller than Mary. Jeni is taller than Mary and shorter than Alice. Sam is shorter than Mary. Who is the tallest?

    (A) Alice   (B) Mary   (C) Jeni   (D) Sam   (E) Can't Tell

16. How many different 2-digit numbers can be formed using the digits of the number 2021?

    (A) 1   (B) 2   (C) 3   (D) 4   (E) 5

17. Lucas has $8.75 more than his sister Alma in his piggy bank. If Lucas has $32.25, how much money do Lucas and Alma have altogether?

    (A) $23.50   (B) $26.50   (C) $41   (D) $55.75   (E) $73.25

18. 6 bananas weigh the same as 2 eggplants. If the weight of one banana is 210 g, find the weight of one eggplant.

    (A) 210   (B) 230   (C) 240   (D) 510   (E) 630