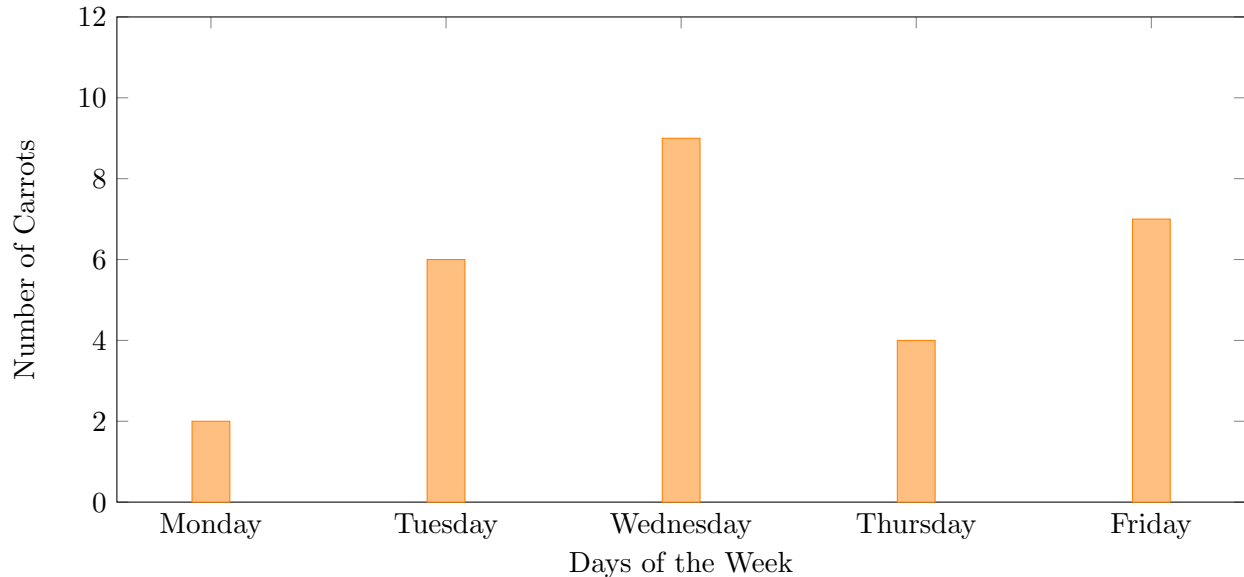


Instructions:

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 **60 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, fill it in the appropriate circle on the response form.
5. This form has 9 questions in Part A, 9 questions in Part B, and 5 questions in Part C.
6. Scoring:
 - Each correct answer is worth:
 - 4 points in Part A,
 - 5 points in Part B,
 - 6 points in Part C.
 - Each unanswered question is worth 2 points.
 - Incorrect answers are worth 0 points.

Part A (4 points each)

1. The graph shows the number of carrots Renert Rabbit ate each day of the week. On which day did he eat the fewest carrots?

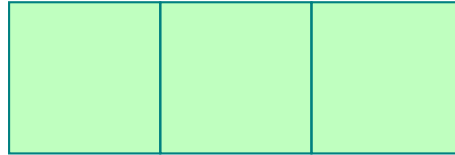


- (A) Monday (B) Tuesday (C) Wednesday (D) Thursday (E) Friday
2. Which of the following numbers is the largest?
(A) 2777 (B) 7272 (C) 7227 (D) 7277 (E) 2727
3. Kian buys three packs of pokemon cards. There are 15 cards inside each pack. How many cards are there in the three packs combined?
(A) 45 (B) 24 (C) 9 (D) 15 (E) 36
4. Which of the following equations is **not** correct?
(A) $0 + 3 - 2 \div 2 = 2$
(B) $2 \times 2 - 3 + 0 = 1$
(C) $2 \div 2 + 0 + 3 = 4$
(D) $3 \times 2 \div 2 + 0 = 3$
(E) $2 + 2 - 3 \times 0 = 0$
5. If the day after tomorrow is Tuesday, what day of the week will it be the day before yesterday?
(A) Sunday (B) Saturday (C) Monday (D) Friday (E) Thursday

6. Kensie has only quarters in her piggy bank. If she has a total of \$6.75, how many quarters does she have?

- (A) 6 (B) 9 (C) 12 (D) 15 (E) 27

7. A rectangle is divided into three squares. The perimeter of each square is 20 cm. What is the perimeter of the original rectangle?

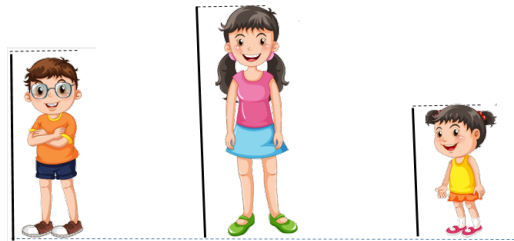


- (A) 35 cm (B) 40 cm (C) 50 cm (D) 60 cm (E) 75 cm

8. The cost of one box of apples is half the cost of one box of oranges. If the box of oranges costs \$2, what is the total cost of one box of apples and one box of oranges?

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

9. Jack is 6 cm taller than Tiana and 8 cm shorter than Scotlyn.

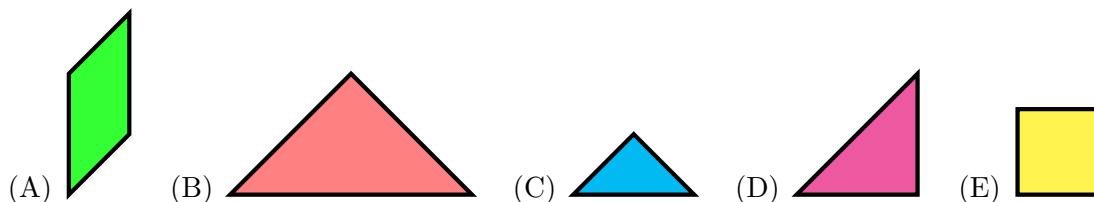
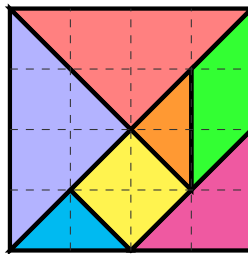


Which of the following is correct?

- (A) Scotlyn is 14 cm taller than Tiana.
(B) Scotlyn is 14 cm shorter than Tiana
(C) Scotlyn is 2 cm taller than Tiana
(D) Scotlyn is 2 cm shorter than Tiana.
(E) Scotlyn is 6 cm taller than Tiana.

Part B (5 points each)

10. If there are 17 horses, 24 cows, and 47 chickens on a farm, how many legs do all the animals have in total?
- (A) 88 (B) 176 (C) 258 (D) 298 (E) 352
11. Renert Rabbit chooses two operations so that when they are applied to any positive, **even** number, the result is always an **odd** number. Which one of the following could be the operations that Renert Rabbit chose?
- (A) divided by 2 and then added 2
 (B) divided by 2 and then added 1
 (C) multiplied by 3 and then added 1
 (D) multiplied by itself and then added 2
 (E) multiplied by 3 and then added 2
12. Ari's computer has a battery life of 5 hours. If he brings his fully charged computer to school without the charger, how much battery life will be remaining at the end of the day if:
- He uses it for 56 minutes in Science
 - He uses it for 1 hour and 23 minutes in English
 - He uses it for 1 hour and 59 minutes in Homework Club
- (A) 0 mins (B) 39 mins (C) 42 mins (D) 4 hrs 18 mins (E) 5 hrs
13. The area of all seven pieces of the tangram is 16 square units (see below). Renert Rabbit created a new shape using six of the seven pieces. If the area of the new shape is 15 square units, which of the following pieces was not used?

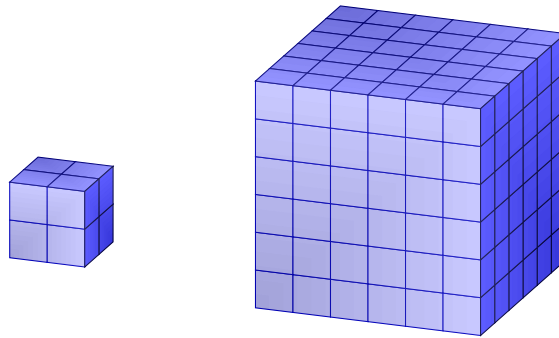


14. Rabbit Cafe sells 3 types of drinks, 2 types of entrées, and 3 types of desserts:

Drink	Entrée	Dessert
water	burger	cake
juice	pizza	pie
milk		ice cream

If David wants one drink, one entrée, and one dessert, how many possible combinations can he order?

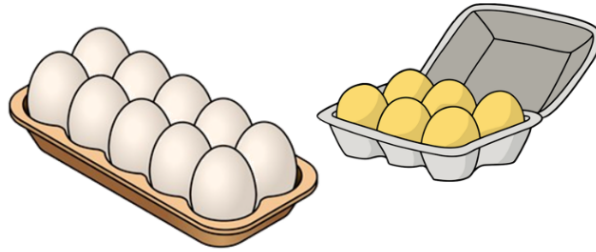
- (A) 2 (B) 3 (C) 8 (D) 12 (E) 18
15. How many $2 \times 2 \times 2$ cubes are needed to make a $6 \times 6 \times 6$ cube?



- (A) 3 (B) 9 (C) 18 (D) 27 (E) 81
16. There were 23 animals sitting side by side to watch a concert: 12 foxes, 6 rabbits, and 5 squirrels. Mr. Adam noticed that two of the same animals were not sitting side by side. Which of the following must be true?
- (A) At least one rabbit is sitting beside a squirrel.
 (B) One of the animals at one of the ends of the row is a rabbit.
 (C) At least one rabbit is sitting between two squirrels.
 (D) At least one squirrel is sitting between two foxes.
 (E) The seating arrangement is impossible.
17. In the word RENERT each letter was replaced with a digit from 0 to 9. The same letters are replaced with the same digits, and different letters are replaced with different digits. If the 6-digit number is as big as it can be, what digit replaced the letter “T”?

- (A) 3 (B) 5 (C) 6 (D) 7 (E) 8

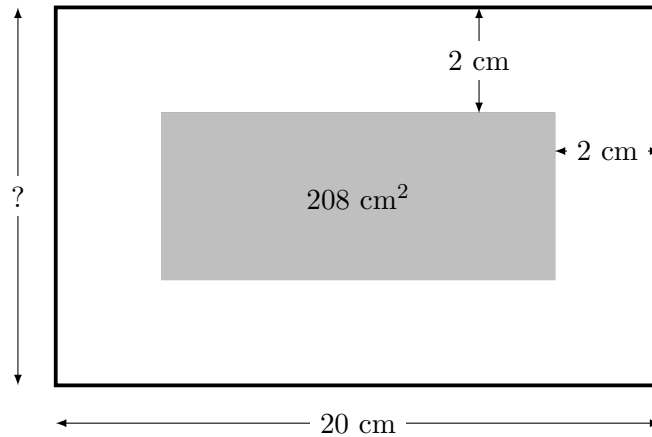
18. 148 eggs are packed into either trays of 10 or 6. Twenty trays are used altogether. João counted the number of trays with 6 eggs in them and Eric counted the number of trays with 10 eggs in them. If they multiply their numbers, what would the product be?



- (A) 84 (B) 91 (C) 96 (D) 99 (E) 100
-

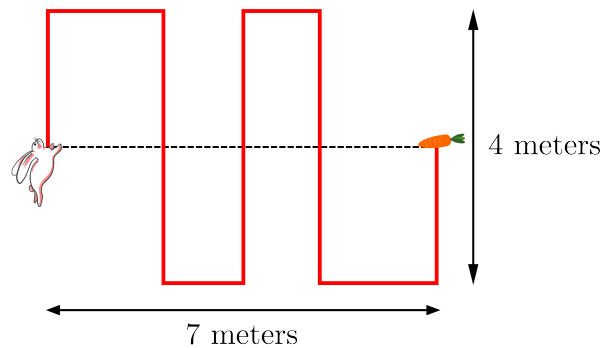
Part C (6 points each)

19. A picture frame has a length of 20 cm. The picture has a border that is 2 cm wide around it. If the area of the picture itself is 208 cm^2 , what is the width of the frame?

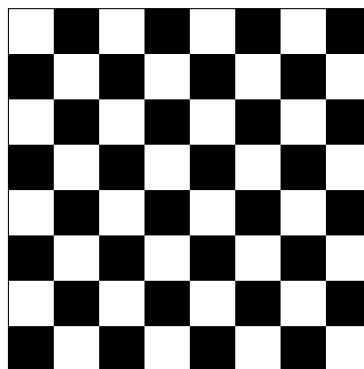


- (A) 13 cm (B) 15 cm (C) 17 cm (D) 11 cm (E) 14 cm

20. The picture shows a red path that Renert Rabbit uses to get a carrot. How long is the path?



- (A) 4 m (B) 7 m (C) 11 m (D) 20 m (E) 23 m
21. Anaya and Elliana bought a 24-slice pizza. Anaya ate half of the pizza, then Elliana ate some slices, and then Anaya ate half of the remaining slices. Finally, Elliana ate the same number of slices that she ate earlier and the pizza was entirely gone. How many slices did Anaya eat in total?
- (A) 12 slices (B) 14 slices (C) 16 slices (D) 18 slices (E) 20 slices
22. Otilia works in a skyscraper. She starts on the first floor and rides up in the elevator to her office floor, which takes exactly one minute. She then rides up to the 72nd floor from her office floor, which takes 82 seconds. Which floor does Otilia work on?
- (A) 10 (B) 12 (C) 30 (D) 31 (E) 36
23. Renert Rabbit placed Easter eggs on an 8×8 chess board and discovered that the number of white squares without any Easter eggs on them was less than 6. The number of squares with Easter eggs on them was four times greater than the number of black squares without Easter eggs. How many of the white squares do not have Easter eggs on them?



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