



PRIMARY 4 (GRADE 4) 2021 CONTEST PAPER

NAME: _____

Index Number: _____

SCHOOL: _____

INSTRUCTIONS:

1. Please **DO NOT OPEN** the contest booklet until the Proctor has given permission to start
2. TIME: **1 hour 30 minutes**.
3. There are 25 questions with 100 total points:
Section A: Questions 1 to 15 score 3 points each, no points are deducted for an unanswered or wrong answer.
Section B: Questions 16 to 25 score 5 points each, no points are deducted for an unanswered or wrong answer.
Section C: Questions 21 to 25 score 6 points each, no points are deducted for an unanswered or wrong answer.
4. Shade your answers neatly using a **2B lead pencil** in the Answer Entry Sheet.
5. PROCTORING: No one may help any student in any way during the contest.
6. No electronic devices capable of storing and displaying visual information are allowed during the course of the exam. Strictly **No Calculators** are allowed.
7. All students must write and shade their **Name, School and Index Number** in the Answer Entry Sheet and Contest booklet.
8. MINIMUM TIME: Students must stay in the exam hall for at least 1 hour.
9. A student must show detailed working and transfer answers to the Answer Entry Sheet.
10. **No exam papers and written notes can be taken out by any contestant.**



ROUGH WORKING

Section A: 15 Multiple Choice Questions

3 points each

Question 1

If it was Monday yesterday, what day of the week will it be in 100 days?

- A. Monday
- B. Tuesday
- C. Wednesday
- D. Thursday
- E. Sunday

Question 2

A book is open, showing two pages with page numbers. If the sum of the two page numbers is 167, what is the page number of the next page?



- A. 83
- B. 84
- C. 85
- D. 86
- E. 87

Question 3

At a local store, there is no tax for school supplies. Matt paid 90 cents for three pencils and two erasers. Nancy paid 35 cents for one pencil and one eraser of the same types. How much does a pencil cost?

- A. 12 cents
- B. 15 cents
- C. 18 cents
- D. 20 cents
- E. 25 cents

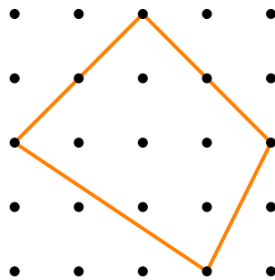
Question 4

Alice made two purchases at the farmer's market. First, she used a 10-dollar bill to buy a watermelon and received \$4 in change. Then, she used a 20-dollar bill for some apples and received \$7 in change. She still had \$17 left after these two purchases. How much money did she have at the beginning?

- A. \$28
- B. \$36
- C. \$41
- D. \$47
- E. \$49

Question 5

In the following figure, each dot is one inch away from its horizontal and vertical neighbors. What is the area of the quadrilateral in square inches?



- A. 4 square inches
- B. 6 square inches
- C. 8 square inches
- D. 10 square inches
- E. 11 square inches

Question 6

If two workers can paint a house in 2 days, how many houses can 12 workers paint in 12 days under the same conditions?

- A. 12
- B. 24
- C. 36
- D. 48
- E. 60

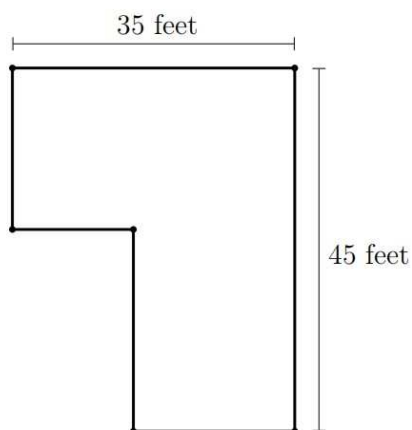
Question 7

Oliver bought a new book of 240 pages. He read $\frac{1}{4}$ of the book yesterday and $\frac{1}{3}$ of the remaining pages today. How many pages of the book are there left to be read?

- A. 96
- B. 132
- C. 144
- D. 156
- E. 178

Question 8

A garden is marked out in the school yard, as shown in the picture below. What is the perimeter of the garden in feet?



- A. 135
- B. 140
- C. 150
- D. 155
- E. 160

Question 9

Emily has some coins in her pocket. There are only quarters and dimes. The number of the quarters is 6 more than the number of the dimes. Each quarter is worth 25 cents; each dime is worth 10 cents. The total value of coins is 290 cents. How many quarters does Emily have?

- A. 4
- B. 6
- C. 8
- D. 10
- E. 12

Question 10

The average weight of a group of four children is 50 pounds. A fifth child joins the group. The average weight of the group becomes 53 pounds. How heavy is the fifth child?

- A. 50 pounds
- B. 53 pounds
- C. 56 pounds
- D. 60 pounds
- E. 65 pounds

Question 11

There are 205 marbles in the box. Andrew, Blake, Carter, and David take turns to remove marbles from the box. Andrew first takes 1 marble, Blake takes 2 marbles, Carter takes 3 marbles, and David takes 4 marbles. Then, Andrew takes another 1, Blake another 2, Carter another 3, and David another 4. They will continue until all the marbles are taken. Who will take the last marble from the box?

- A. Andrew
- B. Blake
- C. Carter
- D. David
- E. Not sufficient information

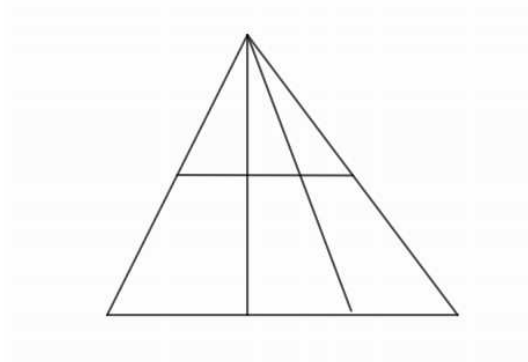
Question 12

Eight children are each riding a bicycle or tricycle in the park. John counts 19 wheels altogether. How many bicycles are there?

- A. 2
- B. 3
- C. 4
- D. 5
- E. 6

Question 13

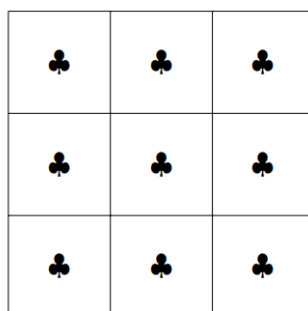
How many triangles can you identify in the following figure?



- A. 8
- B. 9
- C. 10
- D. 11
- E. 12

Question 14

Michael has 9 stickers on a three-by-three grid. He wants to give his friend 3 stickers that are connected on at least one edge. In how many different ways can he cut out the three stickers?



- A. 6
- B. 12
- C. 16
- D. 22
- E. 28

Question 15

What is the value of the following expression?

- A. 15
- B. 17
- C. 19
- D. 21
- E. 23

Section B: 5 Open-Ended Questions

5 points each

Question 16

If the length of a rectangle is increased by 2 cm, its area increases by 14 cm^2 . If its width is increased by 3 cm, the area increases by 24 cm^2 , what is the perimeter of the rectangle?



Your Answer:

Question 17

The sum of three integers , , is 115. If is 3 times as big as , and is greater than by 15. What is the value of the number ?

Your Answer:

Question 18

Jenny fills a glass with water. The glass with the water weighs 750 grams. If she pours out half of the water, then the glass with the remaining water weighs 400 grams. How heavy is the glass itself in grams?

Your Answer:

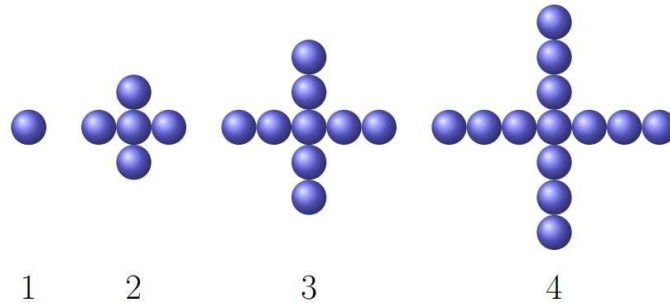
Question 19

A number has 4 digits. The number can be divided evenly by 5. The digit in the hundred's place is 4 times the digit in the ten's place. And the sum of all the digits is 21. What is value of the number?

Your Answer:

Question 20

Maria was making a sequence of growing patterns with marbles. She started with one marble in the first step. Then, she moved on to five marbles in the second step, and nine marbles in the third step. Using all her marbles, she was able to finish the ninth step. How many marbles did she have in total?



Your Answer:

Section C: 5 Open-Ended Questions

6 points each

Question 21

The first and last digit of an 8-digit number is shown in the following figure. If the sum of any three adjacent (or neighboring) digits is 17. What is the sum of all the digits of the number?

8							6
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Your Answer:

Question 22

In the following multiplication problem, each letter represents a different digit from {0, 1, 2, 3, 4, 5, 6, 7, 8, 9}. What four-digit number is represented by STEP?

$$\begin{array}{r}
 \text{S T E P} \\
 \times 4 \\
 \hline
 \text{P E T S}
 \end{array}$$

Your Answer:

Question 23

Kevin has a collection of toy cars. The number is between 50 and 80. If he groups the toy cars by four, there will be one car left. If he groups the cars by nine, there is also one car left. How many toy cars does Kevin have?

Your Answer:

Question 24

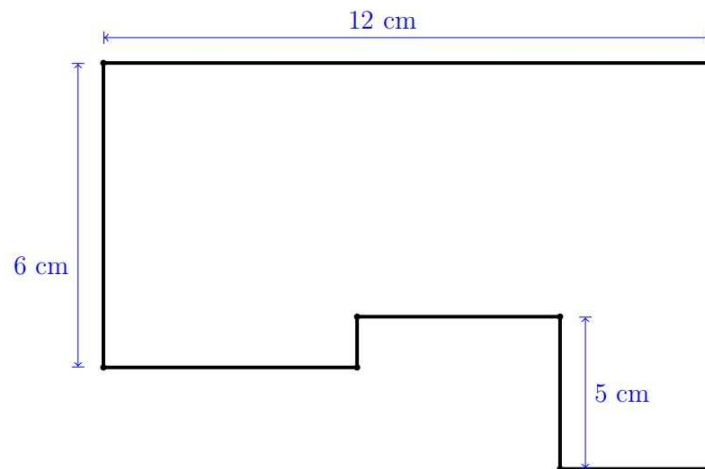
Four numbers {1, 2, 3, 4} are placed in the following table so that each row, column, and diagonal contains each of the four numbers exactly once. What is the number in the square marked by ★?

1	2	3	4
			★
2	1		

Your Answer:

Question 25

In the following figure, all the segments cross each other at right angles. What is the perimeter of the following figure in cm?



Your Answer:
