



PRIMARY 3 (GRADE 3) 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

Ryan stood in a line to ride the roller coaster. He noticed that he was the 10th person counting from the front of the line. He was also the 10th person counting from the end of the line. How many people were in the line?

- A. 10
- B. 19
- C. 20
- D. 21
- E. 25

Question 2

Kevin wrote all the whole numbers from 1 to 100 once, including 1 and 100. How many times did he write the digit 1?

- A. 19
- B. 20
- C. 21
- D. 22
- E. 23

Question 3

Five ears of corn are sold for \$2 at a grocery store. Mom needs to buy 60 ears for a party. How much money does she need to pay at the store?

- A. \$15
- B. \$20
- C. \$24
- D. \$25
- E. \$30

Question 4

A box of crackers weighs 1 kilogram (kg). If the empty box itself weighs 50 grams (g), what is the weight of the crackers in the box?

- A. 450g
- B. 500g
- C. 950g
- D. 1050g
- E. 1250g

Question 5

Jason had seven friends at his birthday party. He cut the birthday cake into 12 equal slices. He and his friends each ate one slice of the cake. What fraction of the cake was left?

- A.
- B.
- C.
- D.
- E.

Question 6

Four-digit whole numbers are to be formed using each of the digits in $\{0, 3, 6, 8\}$ only once. The left-most digit of the numbers is not allowed to be zero. What is the difference between the greatest four-digit number and the smallest four-digit number that can be created?

- A. 8262
- B. 5562
- C. 4950
- D. 3744
- E. 3528

Question 7

There are 45 red or green apples in a basket. The number of red apples is two times the number of green apples. How many more red apples are there than green apples in the basket?

- A. 35
- B. 30
- C. 25
- D. 20
- E. 15

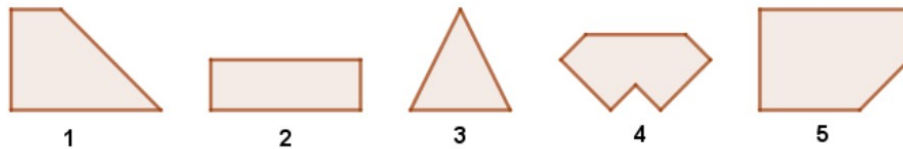
Question 8

A rectangular table has an area of 18 square feet. If one side of the table is 3 feet long, what is the perimeter of the table?

- A. 9 feet
- B. 18 feet
- C. 21 feet
- D. 22 feet
- E. 25 feet

Question 9

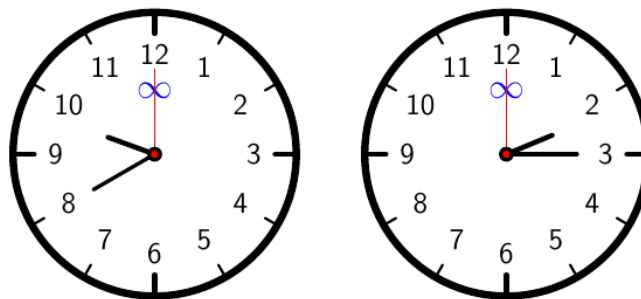
Which of the following shapes cannot be made by folding a rectangular sheet of paper once?



- A. 1
- B. 2
- C. 3
- D. 4
- E. 5

Question 10

A train left Chicago at 9:40pm and arrived at the next station at 2:15am the following day. How many minutes was the ride?



- A. 215
- B. 240
- C. 255
- D. 275
- E. 290

Question 11

In the following multiplication problem, , , represent different digits from 0 to 9. What is the sum of , , and ?

$$\begin{array}{r} A B \\ \times 9 \\ \hline B C B \end{array}$$

- A. 11
- B. 13
- C. 15
- D. 17
- E. 19

Question 12

The amount of water in cup A is one and a half times the amount of water in cup B. If the total amount of water in cups A and B is 1000 ml, how much water does cup B contain?

- A. 200 ml
- B. 300 ml
- C. 400 ml
- D. 500 ml
- E. 600 ml

Question 13

If

$$13 + \heartsuit + \spadesuit = 30,$$

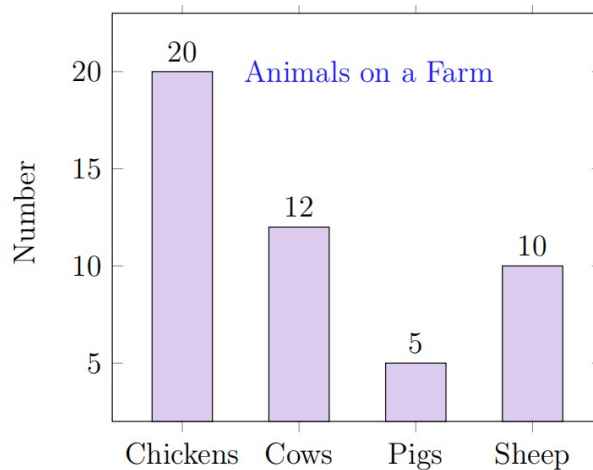
$$\triangle + \heartsuit + \spadesuit = 45,$$

then $\triangle$ is equal to

- A. 13
- B. 15
- C. 20
- D. 25
- E. 28

Question 14

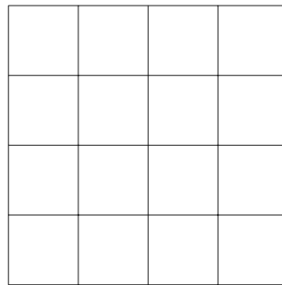
The following bar graph shows the number of different animals on a farm. How many more chickens do we need if we want the number of chickens to be three times the number of cows?



- A. 8
- B. 12
- C. 16
- D. 30
- E. 36

Question 15

How many different squares of any size are there in the following 44 grid?



- A. 16
- B. 25
- C. 29
- D. 30
- E. 32

Section B: 5 Open-Ended Questions

5 points each

Question 16

What is the value of ?

Your Answer:

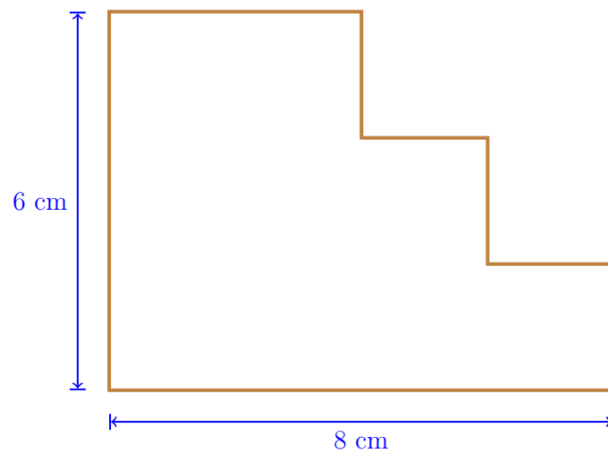
Question 17

David's dad is 24 years older than David. How old will David be when his dad is 3 times as old as he is?

Your Answer:

Question 18

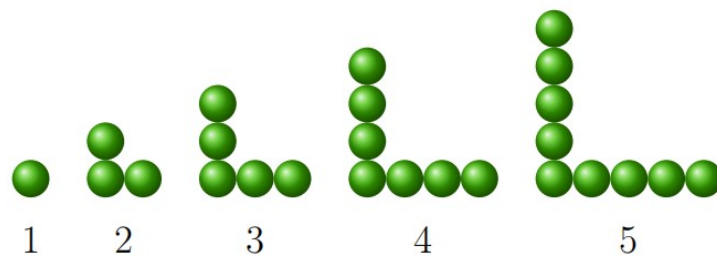
What is the perimeter of the following figure in cm?



Your Answer:

Question 19

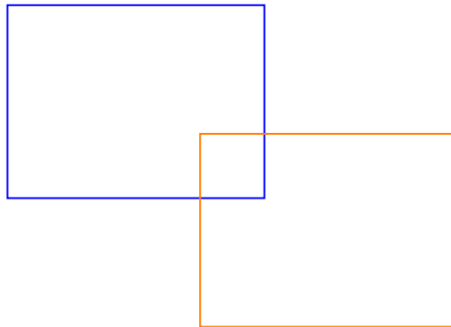
Bob is building shapes with marbles. In the first shape, he uses one marble. In the second shape, he uses three marbles. The pattern continues and Bob is able to reach the tenth shape. How many marbles does Bob use in total?



Your Answer:

Question 20

Two rectangles overlap each other in the following figure. How many right angles are there in the interlocking shape?



Your Answer:

Section C: 5 Open-Ended Questions

6 points each

Question 21

Louis cut a 100-foot rope into three pieces. The second piece is 16 feet longer than the first piece, and the third piece is 18 feet less than the first piece. How long is the third piece of the rope?

Your Answer:

Question 22

Audrey has 16 coins, which are either nickels or dimes. Each nickel is worth 5 cents and each dime is worth 10 cents. The total value is exactly 100 cents. How many nickels does she have?

Your Answer:

Question 23

There are two candy jars with the same number of candies. If we take 18 candies out of the first jar and 26 candies out of the second jar, the candies left in the first jar will be three times as many as the candies left in the second. How many candies does each candy jar have at the beginning?

Your Answer:

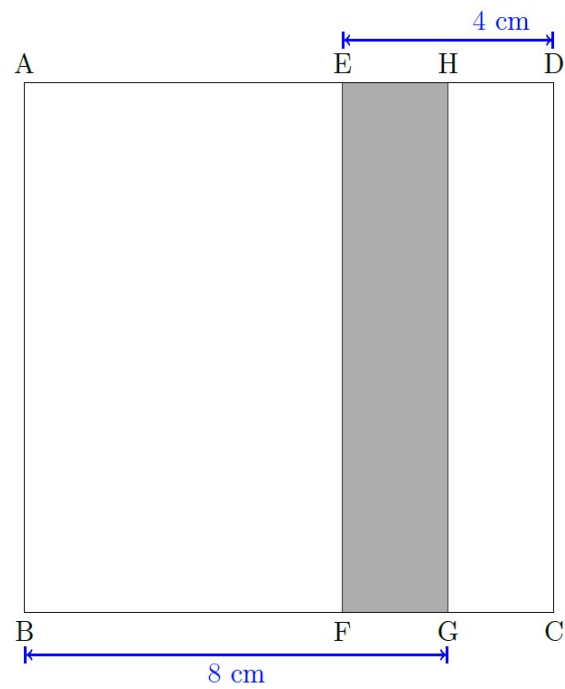
Question 24

If a number is multiplied by 10, then the result is 63 more than the original number. What is this number?

Your Answer:

Question 25

In the following figure, is a square; the shaded region is a rectangle. 4 cm, 8 cm. What is the perimeter of the shaded rectangle in cm?



Your Answer:
