MOUNT ROYAL university I9IO

# Seventh Annual <br> Calgary Elementary School Mathematics Contest 

April 25, 2018

## LEVEL-1 CONTEST

## Instructions:

- You have 50 minutes to answer the 20 questions.
- Record your answer for each question on the separate answer sheet.
- There is no penalty for incorrect answers, so answer every question.
- Good luck!


## Sponsors:



MOUNT ROYAL UNIVERSITY

I9IO

## Pacific Institute for the Mathematical Sciences

PART A: Record the correct answer on the separate answer sheet. Each correct answer is worth 5 points.

1. $(2+3+4+6+7)-(3+4+7+6)=$ ?
(a) 6
(b) 2
(c) 3
(d) 4
2. A piece of string is 10 m long. It is cut into pieces which are each 10 cm long. How many pieces are there?
(a) 10
(b) 50
(c) 100
(d) 200
3. Find the missing number:
$6+12+18+24+30=? \times(2+4+6+8+10)$
(a) 2
(b) 6
(c) 1
(d) 3
4. Mary has 3 quarters, 2 dimes, 2 nickels and 3 pennies. How much money does Mary have?
(a) 108 ¢
(b) 78 c
(c) 83 ¢
(d) 105 ¢
5. What is one third of one fifth of 60 ?
(a) 3
(b) 4
(c) 5
(d) 6
6. The product of two positive whole numbers is 13 . What is their sum?
(a) 13
(b) 12
(c) 4
(d) 14
7. Five identical bags of sand and a 10 kg bag of cement weigh 70 kg altogether. How heavy is one bag of sand?
(a) 10 kg
(b) 11 kg
(c) 12 kg
(d) 14 kg
8. Rajesh reads all pages in a book starting with page 57 and finishing with page 84. How many pages did he read?
(a) 27
(b) 28
(c) 23
(d) 30
9. Ann has 4 boxes of marbles. Each box has the same number of marbles. If she gets 3 more marbles she will have 43 marbles in total. How many marbles are in each box?
(a) 8
(b) 12
(c) 9
(d) 10
10. It is now $10: 45 \mathrm{am}$. If I run for 30 minutes and then walk for 1 hour and 40 minutes, what time will it be?
(a) 12:55am
(b) $1: 55 \mathrm{pm}$
(c) $11: 55 \mathrm{am}$
(d) $12: 55 \mathrm{pm}$

PART B: Record the correct answer on the separate answer sheet. Each correct answer is worth 6 points.
11. Jane has 2 shirts, 3 pants and 2 pairs of socks. In how many different ways can Jane dress?
(a) 10
(b) 7
(c) 6
(d) 12
12. The sum of the ages of Carlos, Ganesh, Maria, and Brady is 73 years. What was the sum of their ages 5 years ago?
(a) 78
(b) 68
(c) 53
(d) 43
13. The area of a square is $25 \mathrm{~cm}^{2}$. What is the perimeter of the square?
(a) 25 cm
(b) 20 cm
(c) 15 cm
(d) 10 cm
14. David bought 50 pencils for his 3 children: Robert, Jane, and Carla. Robert has twice as many as Jane and Carla has 5 . How many pencils does Jane have?
(a) 15
(b) 10
(c) 30
(d) 9
15. Which equation is false?
(a) $\frac{27}{10}=2.7$
(b) $\frac{2}{10}+\frac{3}{100}=0.023$
(c) $\frac{1}{1000}=0.001$
(d) $1+\frac{14}{10}=2.4$

PART C: Record the correct answer on the separate answer sheet. Each correct answer is worth 8 points.
16. How many digits are needed to write down all the numbers from 10 to 100 ?
(a) 181
(b) 182
(c) 183
(d) 184
17. In a movie theater, the rows of seats are numbered from 1 to 50 , but row $\# 13$ is missing. Row number 10 has 5 seats, and all the rest have 10 seats. How many seats are in the movie theater.
(a) 225
(b) 485
(c) 495
(d) 500
18. Jake has filled the numbers 1 to 9 in the cells of a $3 \times 3$ table, each number appearing only once. In the figure, you can see four of these numbers. Jack has noticed that for the number 8 , the sum of the numbers in the neighbouring cells equals 14 . The same is true for the number 9 . Which number has Jack written in the shaded cell?

(a) 1
(b) 7
(c) 8
(d) 9
19. If the area of the shaded region is $48 \mathrm{~cm}^{2}$, what is the area of the square?

(a) $64 \mathrm{~cm}^{2}$
(b) $36 \mathrm{~cm}^{2}$
(c) $32 \mathrm{~cm}^{2}$
(d) $60 \mathrm{~cm}^{2}$
20. A farmer has the same number of horses, cows, and chickens. Altogether these animals have 250 legs. How many cows are there?
(a) 50
(b) 40
(c) 30
(d) 25

