



Sixth Annual
Calgary Elementary School
Mathematics Contest
April 26, 2017

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!

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

1. What is the answer to $4 \times 4 + 4 + 4 + 4 + 4 + 4 + 4 \times 4$?
(a) 32 (b) 48 (c) 56 (d) 144
2. Which of the following is the greatest number?
(a) $2 + 0 + 1 + 7$ (b) $2 \times 0 \times 1 \times 7$
(c) $(2 + 0) \times (1 + 7)$ (d) $20 \times 1 + 7$
3. Three children ate 15 cookies altogether. Mike ate more cookies than any other child. What is the smallest possible number of cookies Mike ate?
(a) 4 (b) 5 (c) 6 (d) 7

4. $(1 + 2 + 3)^2 =$
(a) 6 (b) $1^2 + 2^2 + 3^2$ (c) 12 (d) 36
5. The sum of two consecutive numbers is 231. What is the larger one of these two numbers?
(a) 116 (b) 131 (c) 132 (d) 232
6. Four bags of sand and 20 kg of cement weigh 100 kg altogether. How heavy is one bag of sand?
(a) 5 kg (b) 20 kg (c) 40 kg (d) 80 kg
7. I work 7 hours a day and 5 days a week. If I earn \$350 a week how much do I earn an hour?
(a) \$5 (b) \$7 (c) \$10 (d) \$35
8. The running time of a film is 1 hour and 25 minutes. If the film begins at 6:45pm and is shown without any interruption, at what time will the film end?
(a) 7:10pm (b) 7:25pm (c) 8:10pm (d) 8:25pm
9. A rectangle has an area of 288 cm^2 . Find its width if the length is twice the width.
(a) 12 cm (b) 24 cm (c) 30 cm (d) 60 cm
10. The numbers 108 and 2016 have the same sum of their digits. For example, $1 + 0 + 8 = 9$ and $2 + 0 + 1 + 6 = 9$. Which of the following is the first number greater than 2017 such that the sum of its digits is the same as the sum of the digits of 2017?
(a) 2071 (b) 2125 (c) 2008 (d) 2026

PART B: Record the correct answer on the separate answer sheet. Each correct answer is worth **6 points**.

11. Every birthday, after blowing out the candles, Carla collects all the candles and puts them securely in a bag. At each birthday, the number of candles blown out equals her age. So far she has collected 55 candles. How old is Carla?
(a) 5 (b) 10 (c) 11 (d) 55
12. Judy ate $\frac{3}{4}$ of a 240g chocolate bar and $\frac{2}{3}$ of a 210 g bar. How much chocolate did she eat?
(a) 140 g (b) 180 g (c) 320 g (d) 450g
13. Peter is older than John by one year and one day. Peter was born on January 1, 2011. On what day was John born?
(a) Jan 2, 2010 (b) Dec 31, 2012
(c) Dec 31, 2009 (d) Jan 2, 2012
14. Ben has 100 dollars. Each of his four siblings has 40 dollars. How many dollars does Ben have to give to each of his four siblings so that all of the children have the same amount of money?
(a) \$ 10 (b) \$ 12 (c) \$ 15 (d) \$ 20
15. Two 10 cm by 10 cm squares overlap to form a 10 cm by 15 cm rectangle. What is the area of the region where the two squares overlap?
(a) 50 cm² (b) 100 cm² (c) 150 cm² (d) 200 cm²

PART C: Record the correct answer on the separate answer sheet. Each correct answer is worth **8 points**.

16. A dragon has five heads. Every time a head is chopped off, five new heads grow. If six heads are chopped off, one by one, how many heads will the dragon finally have?
(a) 25 (b) 28 (c) 29 (d) 30
17. Romeo likes to add the digits that he sees on his digital clock. For example, if the clock shows 18:20, Romeo get the sum $1 + 8 + 2 + 0 = 11$. What is the biggest sum he can get from his 24-hour clock?
(a) 19 (b) 22 (c) 24 (d) 36
18. On a 400m long log, a worm starts to crawl from one end. Each day it crawls half of the remaining distance. After 4 days, how far is it from the other end of the log?
(a) 25 m (b) 50 m (c) 350 m (d) 375 m
19. Randy is asked to colour a large number of squares using different colours. He uses green for the first square, red for the second, blue for the third, pink for the fourth, purple for the fifth, and then repeats the same sequence over and over. What colour is the 2017th square?
(a) Green (b) Red (c) Pink (d) Purple
20. A half-filled water jug with water weighs 500 g, while the same jug weighs 400 g when only a quarter of it is filled with water. If the jug is filled completely, how much does it weigh?
(a) 600 g (b) 700 g (c) 800 g (d) 900 g