Fifth Annual

Calgary Elementary School Mathematics Contest

April 27, 2016

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:

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

1. $(3 + 4 + 5 + 6 + 7 + 8) - (7 + 5 + 3) =$
   (a) 18   (b) 15   (c) 43   (d) 14

2. The product of two whole numbers is 11. What is the sum of the two numbers?
   (a) 2   (b) 12   (c) 13   (d) 1

3. What is the missing number in the following equation?
   $$7 + 14 + 21 + 28 + 35 = ? \times (1 + 2 + 3 + 4 + 5)$$
   (a) 5   (b) 9   (c) 11   (d) 7

4. $(4 + 5)^2 =$
   (a) 9   (b) 41   (c) 81   (d) 18

5. Which of the following is the smallest number?
   (a) $2 + 0 + 1 + 6$ (b) $2 \times 0 \times 1 \times 6$
   (c) $(2 + 0) \times (1 + 6)$ (d) $(2 \times 0) + (1 \times 6)$

6. What is the next number in the sequence?
   $$2, 2, 4, 6, 10, 16, ?$$
   (a) 26   (b) 24   (c) 22   (d) 20

7. On Monday there were 30 birds. They double in number every day. How many birds are there on Saturday?
   (a) 120   (b) 240   (c) 480   (d) 960

8. My watch shows that the time is now 9:38am. After 3 hours and 31 minutes what time will my watch show?
   (a) 12:09pm (b) 1:09pm (c) 3:09pm (d) 12:69pm

9. Which of the following numbers is even?
   (a) $1 + 1 + 1 + 1 + 1$ (b) $7 \times 11 + 2 \times 3$
   (c) $12 \times 3 - (1 + 1 + 2)$ (d) $(12 \times 3) - (2 + 3 + 4)$

10. A shark swims 280 kilometres per week. The shark swims 20 hours per day. How many kilometres does the shark swim in an hour?
    (a) 14km   (b) 40km   (c) 1km   (d) 2km

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

11. John bought 5 pairs of pants and 7 shirts. Each pair of pants costs $15.00. He spent a total of $145.00. How much does each shirt cost? Note that all shirts cost the same amount.
    (a) $5.00   (b) $10.00   (c) $15.00   (d) $20.00

12. A school bus picks up some kids from the first bus stop. Then the bus goes 1 block north, 3 blocks east, 1 block south, and 1 block east. Where is the bus in relation to the first bus stop?
    (a) 2 blocks east   (b) 2 blocks north
    (c) 4 blocks east   (d) 4 blocks north

13. What fraction of the figure below is shaded?
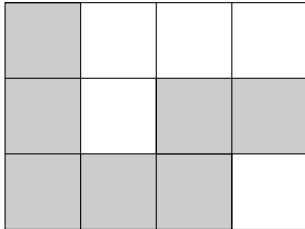
    (a) $\frac{7}{12}$ (b) $\frac{7}{5}$ (c) $\frac{5}{7}$ (d) $\frac{12}{7}$

14. What is the difference between the largest and the smallest 4-digit numbers that can be made using the digits 2,3,1,6? No repetition of digits is allowed.
    (a) 7557   (b) 8888   (c) 7683   (d) 5085

15. Mark walked $1\frac{1}{4}$ hours to school and $\frac{1}{2}$ hour to his friend's house. What is the total amount of time Mark spent walking?
    (a) $1\frac{2}{4}$ hrs   (b) $1\frac{3}{4}$ hrs   (c) $2\frac{1}{4}$ hrs   (d) $1\frac{2}{6}$ hrs

PART C: Record the correct answer on the separate answer sheet. Each correct answer is worth **8 points.**
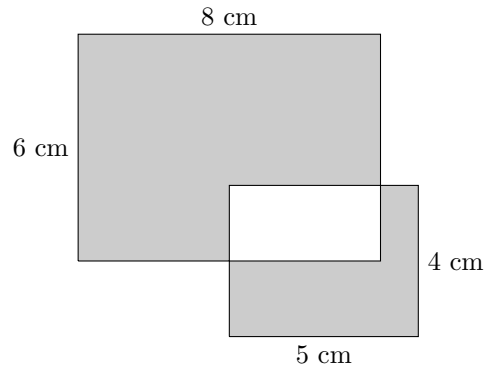
16. Carla divided a secret number by 6. Then she added 6 to the result and multiplied the number she obtained by 6. In the end she got 666. What was Carla's secret number?
    (a) 630   (b) 105   (c) 111   (d) 36

17. There are two types of little boxes: one can hold 4 candies, the other can hold 10 candies. What is the least number of boxes needed to store 48 candies (without any extra space in any of the boxes)?
    (a) 9   (b) 8   (c) 6   (d) 5

18. On your birthday you got a whole cake for yourself. On that day you ate $\frac{3}{7}$ of the cake. On the next day you ate $\frac{1}{2}$ of the remaining cake. What fraction is still left for the third day?
    (a) $\frac{4}{7}$ (b) $\frac{2}{7}$ (c) $\frac{3}{7}$ (d) $\frac{1}{7}$

19. Two cars leave the same city at the same time, one going north and the other going south. If one car is travelling at 75km per hour and the other car is travelling at 115km per hour, how long will it take for them to be 950km apart?
    (a) 2 hrs   (b) 3 hrs   (c) 4 hrs   (d) 5 hrs

20. Two rectangles with dimensions 6 cm by 8 cm and 4 cm by 5 cm overlap as shown below. The area of the shaded region is 52 cm^2. What is the area of the overlapped region?

    (a) 16 cm^2 (b) 8 cm^2 (c) 6 cm^2 (d) 4 cm^2