February 2015
Grade Four Mathematics Contest

Please observe the following instructions:

1) You have 45 minutes to write the contest.

2) The contest is multiple-choice with four choices for each question. Write the CAPITAL letter of the answer you choose on the line to the right of each question.

3) Each question answered correctly is worth one mark, and the sum of the correct answers is the score.

4) Marks are not taken off for wrong answers.

5) No calculators are allowed.

Student Name: _____

Score: / 30

1) 13 + 16 + 24 + 17 = _____
   A) 60　　　　　　B) 70　　　　　　C) 80　　　　　　D) 90 _____

2) Complete this sequence: 2, 5, 8, 11, 14, 17, ___
   A) 18　　　　　　B) 19　　　　　　C) 20　　　　　　D) 21 _____

3) Lucinda went to the grocery store. After paying for her groceries, the cashier gave her change in all coins: 5 quarters, 5 nickels, and 5 dimes. How much change did Lucinda receive?
   A) $1.55　　　　　B) $1.75　　　　　C) $1.90　　　　　D) $2.00 _____

4) Robby the Rabbit found a giant carrot! He wants to cut the carrot into 11 pieces. How many parallel cuts must he make?
   A) 9　　　　　　　B) 10　　　　　　C) 11　　　　　　D) 12 _____

5) Bob likes words, phrases, and numbers that are palindromes! Which of the following would Bob **not** like?
   A) RACECAR　　　B) 110 011　　　C) STARS RATS　D) 123 123 _____

6) Joanne's locker combination contains prime numbers only. Which of the following could be Joanne's locker combination?
   A) 17, 2, 89　　　B) 15, 3, 91　　　C) 19, 3, 91　　　D) 13, 5, 51 _____

7) Rafael's Reptile Pet Store sells lizards only. When he was having a sale one day, he counted all the people and lizards and found there were 15 heads and 48 legs. How many people attended Rafael's lizard sale?
   A) 3　　　　　　　B) 4　　　　　　　C) 5　　　　　　　D) 6 _____

8) Dorothy needs new ruby slippers for the Valentine's Day dance. The day of the dance is 1 week after 2 days before the day after February 14th. When is the day of the dance?
   A) February 10th　B) February 13th　C) February 15th　D) February 20th _____

9) The number of sides of an isosceles triangle times the number of sides of a hexagon equals?
   A) 12　　　　　　B) 15　　　　　　C) 18　　　　　　D) 21 _____

10) Which is more: a dozen dozen shirts, 2 dozen pairs of socks, or 4 dozen towels?
    A) A dozen dozen shirts　B) 2 dozen pairs of socks　C) 4 dozen towels　D) They are all the same amount _____

11) Mrs. Atom's class of 34 students signed up for the Science World field trip. At Science World, all but 18 students went on the Space Orbit ride. How many students did not go on the Space Orbit ride?
    A) 14　　　　　　B) 16　　　　　　C) 18　　　　　　D) 32 _____

12) Which of the following is **not** a perfect square?
    A) 121   B) 100   C) 47   D) 36   _____

13) Connor the coin collector loves coins! He has 3 nickels, 3 dimes, and 3 quarters in his pocket. Without looking, what's the **least** number of coins he will need to take out of his pocket at once to be sure that he has taken out a quarter?
    A) 1   B) 2   C) 7   D) 9   _____

14) A number + its square root = 12. What is the number?
    A) 3   B) 6   C) 9   D) 25   _____

15) Bobbie loves blowing bubbles. How many ways can she arrange the letters in the word **BUBBLE**, including the way that spells "bubble"?
    A) 6   B) 12   C) 120   D) 720   _____

16) At the 2015 Wimbledon Championship, eight teams of two players each competed. If **all** the players "fist-bumped" each other once, how many fist bumps were there in total?
    A) 15   B) 16   C) 64   D) 120   _____

17) Sofia's school bell rings at 8:55 a.m. Her alarm clock goes off at 7:30 a.m., but she gets up 28 minutes later. She takes 12 minutes to eat breakfast, 9 minutes to shower and get dressed, and 3 minutes to comb her hair. It then takes her another 13 minutes to pack her backpack, plus 8 minutes to make her lunch. Her walk to school takes another 15 minutes. Which of the following is true?
    A) She is early by one minute   B) She is late by 3 minutes   C) She is late by 5 minutes   D) She is right on time   _____

18) Bonnie lives 20 km away from her friend Kiana. Bonnie decides to visit Kiana one day, and makes a stop $\frac{1}{4}$ of the distance between their houses. After her stop, how many **more** kilometres does Bonnie need to travel to get to Kiana?
    A) 5   B) 10   C) 15   D) 20   _____

19) Silly mirrors at Franky's Fun House are numbered consecutively from 38 to 64. Mirrors that make you shrink have odd numbers on them. Mirrors that make you stretch have even numbers on them. How many mirrors will make you shrink?
    A) 13   B) 14   C) 26   D) 27   _____

20) Katie has a collection of comic books. She can put her comic books into groups of 2s, 3s, 6s, and 11s, evenly without remainders. How many comic books could Katie have?
    A) 111   B) 222   C) 363   D) 396   _____

21) Johnny and Donny were in a Silly Band. Johnny strums a chord on his guitar every 8 seconds and Donny taps his tambourine every 12 seconds. If they started playing together at 7 p.m., how many seconds later would they strum and tap together?
    A) 12   B) 20   C) 24   D) 96   _____

22) 6! ÷ 4! + 4! + 3! – 2! – 5! = _____
   A) –58   B) –62   C) 0   D) 57   _____

23) At Farmer Benny's bunny farm there are 100 bunnies. Thirty-two ate apples
   and thirty-six ate carrots. If 49 of these bunnies slept the whole time,
   how many bunnies ate only carrots?
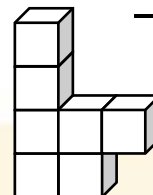   A) 5   B) 19   C) 25   D) 36   _____

24) Belinda scored an average of 18 points in her first 6 basketball games. How many points
   did she score in total?
   A) 18   B) 100   C) 108   D) 120   _____

25) I – IX + IX × III = ?
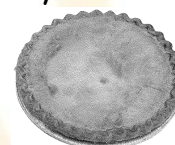   A) 3   B) 4   C) 19   D) 23   _____

26) At choir practice, the Flee Club can sing 18 songs in 45 minutes. The Womblers can sing
   17 songs in 30 minutes. If both groups start singing at 12:00 p.m., how many songs will
   they have sung by 2:00 p.m.?
   A) 35   B) 58   C) 116   D) 120   _____

27) Charlie built a tower of blocks and glued them together. His friend Hudson
   dropped the tower into a bowl of soup! How many block faces did not have
   soup on them?
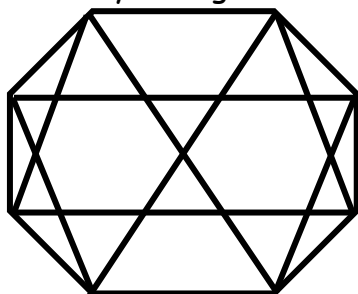   A) 13   B) 14   C) 15   D) 16   _____

28) Ciarrai bought a circular cake for her sister's 10th birthday. If she makes 3 cuts across
   the cake, what is the greatest number of pieces she can end up with?
   A) 3   B) 4   C) 5   D) 7   _____

29) Amanda baked an apple pie for her sisters, Betty, Carla, and Diane. If Betty
   ate one third of the pie, Carla ate half of what was left, and Diane ate
   one sixth of the whole pie, how much was left for Amanda?
   A) $\dfrac{1}{6}$ B) $\dfrac{1}{2}$ C) $\dfrac{1}{3}$ D) $\dfrac{2}{3}$ _____

30) How many triangles are in this diagram?

   A) 38   B) 40   C) 42   D) 44   _____