



# Spirit of Math

## s c h o o l s

2007


### Grade Four Mathematics Competition

Please observe the following instructions:

- 1) You have 45 minutes to write the competition.
- 2) The contest is multiple-choice with four choices for each question. Write the 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)  $12 + 23 + 18 + 7 =$   
 a) 32                      b) 45                      c) 60                      d) 100  
 \_\_\_\_\_
- 2) Which of the following shapes has the greatest number of sides?  
 a) triangle              b) hexagon              c) pentagon              d) square  
 \_\_\_\_\_
- 3)  Joe and Jane drove from Ottawa to Toronto and arrived in Toronto at 3:30pm on Friday. If the drive took 4 hours, what was the day and time when they left Ottawa?  
 a) 10:30am Thursday              b) 11:30am Friday              c) 12:30pm Friday              d) 8:00pm Friday  
 \_\_\_\_\_
- 4) What is the next term in the sequence: 32, 43, 54, 65....  
 a) 57                      b) 66                      c) 76                      d) 96  
 \_\_\_\_\_
- 5) Anika read her favourite book from the top of page 8 to the bottom of page 37. How many pages did she read?  
 a) 29                      b) 30                      c) 31                      d) 45  
 \_\_\_\_\_
- 6) How many interior angles are there in a rectangle?  
 a) 4                      b) 5                      c) 6                      d) 7  
 \_\_\_\_\_
- 7) There are 25 video games at Rachel's house. She had borrowed all but 14 of them from her friends. How many video games actually belong to Rachel?  
 a) 5                      b) 11                      c) 14                      d) 25  
 \_\_\_\_\_
- 8) My grandfather's birthday is 4 days after 9 days before my first day of school on September 7<sup>th</sup>. When is my grandfather's birthday?  
 a) Sept. 2<sup>nd</sup>              b) Sept. 5<sup>th</sup>              c) Sept. 10<sup>th</sup>              d) Sept. 12<sup>th</sup>  
 \_\_\_\_\_
- 9)  $5 \times 5 \times 5 \times 2 \times 2 \times 2 = \underline{\hspace{2cm}}?$   
 a)  $2^3$                       b)  $5^3$                       c)  $10^3$                       d)  $50^3$   
 \_\_\_\_\_
- 10) If you stacked 10 dimes, approximately how high would the stack be?  
 a) 10 mm              b) 15 cm              c) 1 m                      d) 5 m  
 \_\_\_\_\_
- 11) What is the value of  $3 + 4 \times 6 - 7$ ?  
 a) -1                      b) 10                      c) 20                      d) 35  
 \_\_\_\_\_
- 12) At the World Arm Wrestling Championship competition, each of the 15 competitors arm wrestles each other once. How many arm wrestling matches are there altogether?  
 a) 30                      b) 75                      c) 99                      d) 105  
 \_\_\_\_\_



- 13) Ms. Mathalot told your class: "Do not, not do your homework".

What should you do?

- a) Do your homework      b) Do not do your homework      c) Do half of your homework      d) Give up

- 14) In soccer the goal posts are 732 centimetres apart.

What is this distance in decimetres?



- a) 7.32      b) 73.2      c) 7320      d) 9000

- 15) First, find the product of 5 and 4. Now find the difference between 5 and 4 and add it to your first number. What do you get?

- a) 10      b) 21      c) 43      d) 50

- 16) On what day in 1999 was the year 63 days old?

- a) March 4<sup>th</sup>      b) March 6<sup>th</sup>      c) March 8<sup>th</sup>      d) March 11<sup>th</sup>

- 17) A clock loses 5 minutes every hour.


How much time will it lose in one day?



- a) 5 minutes      b) 30 minutes      c) one hour      d) two hours

- 18) In a 4 by 6 grid, how many pathways are there that travel from the bottom left corner to the top right corner if you can only move to the right or up?

- a) 100      b) 150      c) 210      d) 300

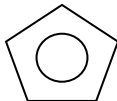
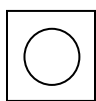
- 19)  Carmen is going to wrap a present and she wants to know how much wrapping paper she will need. She knows she has to measure the box, but which of the following measurements would be the best for her to figure out before she buys the paper?

- a) surface area      b) velocity      c) volume      d) weight

- 20) Freddie jumped 11.5 cm, Todd jumped 0.89 m, Roo jumped 150 mm, and Chet jumped 0.0004 km. Who jumped the farthest?

- a) Chet      b) Freddie      c) Roo      d) Todd

- 21) Which diagram comes next in the pattern?



22) Farmer Felicia has a bunch of cows and chickens. She counts 50 heads and 148 legs. How many cows does she have?

- a) 24                      b) 30                      c) 40                      d) 50

23) Five hamburgers, five fries and five pop cost \$35.

How much would you pay for

two hamburgers, two fries, and two pop?



- a) \$5                      b) \$14                      c) \$17                      d) \$20

24) Zoe can feed six horses in one hour. Matt takes three times as long to feed that many horses. How long will it take them together to feed 32 horses?

- a) 2 hours                      b) 3 hours                      c) 4 hours                      d) 6 hours

25) How many black squares are there on an 8 x 8 square chessboard?



- a) 1                      b) 16                      c) 32                      d) 64

26) Shawn has Yu-Gi-Oh and Magic cards. Four-fifths of his cards are Magic. There are 44 Magic cards. How many Yu-Gi-Oh cards does Shawn have?

- a) 11                      b) 16                      c) 25                      d) 40

27) Melissa calls a number a "cool prime" if it is a prime number and when you add up the digits, the sum is also a prime number. For example, 29 is a "cool prime" because 29 is prime and  $2 + 9 = 11$  which is also prime. Which of the following numbers is a "cool prime"?

- a) 38                      b) 83                      c) 97                      d) 123

28) At Pascal's pappadam party, there were 18 children but only 24 pappadams. How many pappadams should each child get so that everyone gets an equal amount?



- a)  $\frac{3}{4}$                       b)  $1\frac{1}{3}$                       c)  $1\frac{1}{2}$                       d) 3

29) What is the probability of getting a sum of 6 on one throw of two fair cubic dice?



- a)  $\frac{1}{8}$                       b)  $\frac{5}{36}$                       c)  $\frac{1}{2}$                       d)  $\frac{11}{36}$

30) How many different ways can you make 25¢ using pennies, nickels, dimes and/or quarters? (You may use all, none, or some of each type of coin.)

- a) 1                      b) 5                      c) 10                      d) 13