# The Mathematical Crusade Junior Surprise Event

Q 1. Solve the sudoku.

	Н									G	
	D	L		K		Д	E		В		F
		J		1	D		В	G			
		В							$\circ$	K	
			Κ	Α			L				0
		С	В		Н			D		L	
	G		1			$\circ$		E	J		
А				С			Κ	В			
В	J	Н									
			С	F		В	Н		Е		
F				Н	J		G		Κ	В	
	А									F	

Q 2. The word "answer" in the test refers to YOUR answer, not some hypothetical "best" answer.

After choosing the 8 answers score the test by comparing each question with your answers.

Score 1 point for each question answered correctly, o otherwise.

Keep re-taking the test, trying to get the highest possible score.

### 1. The next question with the same answer as this one is:

(A) 2 (B) 3 (C) 4 (D) 5

#### 2. The first question with answer C is:

(A) 1 (B) 2 (C) 3 (D) 4

### 3. The last question with answer A is:

(A) 5 (B) 6 (C) 7 (D) 8

### 4. The number of questions with answer D is:

(A) 1 (B) 2 (C) 3 (D) 4

### 5. The answer occurring the most is: (if tied, first alphabetically)

(A) A (B) B (C) C (D) D

## 6. The first question with the same answer as the question following it is:

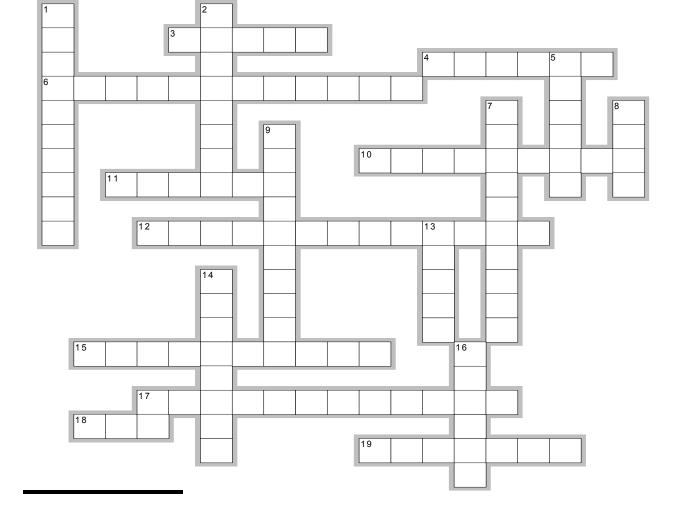
(A) 2 (B) 3 (C) 4 (D) 5

### 7. The answer occurring the least is: (if tied, last alphabetically)

(A) A (B) B (C) C (D) D

### 8. The highest possible score on this test is:

(A) 5 (B) 7 (C) 6 (D) 8



#### At least 2 birds will be in the same hole. (10) 3. 1. The amount of space taken by a 3-D object (6) 2. Take away. (8) 4. It is no longer the center of the city. (HINT: Think Falling green numbers. (6) 5. inside the conic sections) (12) dx / dt (10)7. 10. It's going to go on and on and on.... (9) 8. Autograph of a triangle. (4) This famous mathematician and scientist wrote Man's favourite rotten fractal (10) more on religion and alchemy than he did on 13. Do butterfly's wings cause tornadoes? \_\_\_\_ Theory (5) natural science. (6) \_\_ and beyond! (8) One concerned with particular problems related to 14. To \_\_\_\_ logic, space, transformations, numbers and more "Formatted" in 1601, 300 years before one of general ideas that encompass these concepts. Oh his theorems was solved. (6) come on, you are one! 17. Tasty mathematical constant (2) "There are lies, damned lies and \_\_\_\_\_."-Benjamin Disraeli (10) 17. Chance of finding these are 1 / ln(N)[N-natural numbers (12) 18. Some Indian-Greek Tea (3) 19. "This statement is false", Grand-hotel mystery, Zeno's are examples of a \_\_\_\_\_. (7)

Across

**Down** 

### Numbrix

Start anywhere, fill in the blank squares with missing numbers so that they make a path in numerical order, 1 through 81, i.e. 2 will be adjacent (horizontally or vertically) to 1 and 3 and so on till 80, which will be adjacent to 79 and 81. You can work horizontally or vertically in any direction. Diagonal paths are not allowed.

77		7		21		25	
	79		3		19		
11						31	
	13				17		
69						35	
	57		59		63		
51		47		61		39	