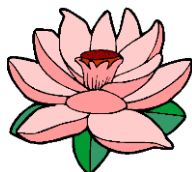


SAMPLE QUESTION PAPER

NSM GURUCOOL MATHATHON 2017, LEVEL 2 WISHWIN

(Level 2: Grades 4, 5)



(December 16, 2017)

Student Name:

Grade:

Note:

- 1) Write your name on all the sheets
- 2) Calculators are not allowed during the competition
- 3) All units should be labelled.
- 4) All solutions should be simplified unless specified otherwise.
- 5) Please hand over your working sheet along with your answer sheets.

Student Name:

Exam duration: 1 hour

Grade:

MATHATHON 2017 - Sample Question Paper
(Level 2: Grades 4, 5)

Section 1: Rapid Math: For each problem below, solve the problem and write the correct answer (as a mixed number such as $4\frac{1}{2}$ or a whole number such as 2 in the space provided.)

1) $\frac{7200}{12} =$
2) $9\frac{1}{4} + 2\frac{1}{4} =$

Section 2: For each problem, solve and write the correct answer in the space provided.

- 3) Plano Elementary school's music club decides to invest in musical instruments. The students buy 5 flutes, 12 drums, 20 violas, and 7 sitars. They see that 2 flutes and 4 drums are defective. So they return those instruments. How many musical instruments does the club have?
- 4) Solve the problem: $2005 \div (2 + 0 + 0 + 3) - (2 \times 0 \times 0 \times 3)$
- i) 1
ii) 5
iii) 401
iv) 2005

Section 3: Read the instructions for each problem and solve the problem.

- 5) The digit 7 in which of these numbers represents a value of 7 ones? Choose the correct answer.
- i) 8.711
ii) 7.4
iii) 700
iv) 71111111
- 6) What is 10 to the power 5?
- i) $10+10+10+10+10$
ii) 10,000
iii) 100,000
iv) $10+5$

Section 4: Solve each problem below.

- 7) If $x = 7$ and $y = x + 2$, solve the two equations below.

I) What is $x + y + xy - x = ?$ II) What is $x - y + xy + y = ?$

- i) 72 and 79
- ii) 72 and 70
- iii) 79 and 77
- iv) 79 and 97

8) A school has 8 floors. Each floor has 30 classrooms except the top floor which has 1 classroom. How many total classrooms does the school have?

- i) 210
- ii) 241
- iii) 211
- iv) 240

Section 5: Analytical and Critical thinking problems.

9) Tara bought 3 dresses for \$12.48 each and 2 pairs of pants for \$14.78 each. She paid 5% tax on her purchases. How much money did Tara spend in all?

10) The length of one side of a cube is $\frac{1}{3}$ feet. What is its volume in cubic inches?

- i) $\frac{1}{9}$
- ii) 9
- iii) 27
- iv) 64

Problems 11 and 12 are based on the information provided below.
READ THE INFORMATION AND SOLVE 11 AND 12.

The 4th grade class sold 415 candies to raise funds for Hurricane Harvey by selling candy. Each candy was \$1. They donated 75% of their funds towards Hurricane Harvey and donated the rest towards school building construction project.

11) How much money did they donate for Hurricane Harvey?

- i) \$410.75
- ii) \$311.25
- iii) \$348.00
- iv) \$401.90

12) How much money did they donate for the school building?

- i) \$100.75
- ii) \$102.25
- iii) \$103.75
- iv) \$102.75