RAMAGYA SCHOOL, NOIDA

V/ MATHEMATICS / 2017-18

OLYMPIAD PRACTICE WORKSHEET

LOGICAL REASONING

1) Jack: If we find the place value of each digit of a number and add them then result will be equal to the number.
Codi: If there is 0 in the middle of the number then you will be wrong.
Who is correct?

a) Jack
b) Codi
c) Both are correct
d) Both are partially incorrect

2) 17, 19 is a pair of twin prime. To make it a prime triplet which one of the following prime numbers would you like to choose?

a) 11
b) 13
c) 17
d) 19

3) X and Y are two fractions. When twice of X is subtracted from Y we get $\frac{12}{25}$. If Y is equal to $\frac{3}{4}$. Find the value of X + Y.

a) $\frac{277}{200}$
b) $\frac{200}{177}$
c) $\frac{200}{277}$
d) $\frac{177}{200}$

4) What least number should be subtracted from 23.56 so that position of the digits in decimal part gets interchanged?

a) 1.09
b) 0.91
c) 0.1
d) 0.65

5) If one side of an equilateral triangle is 10 cm long, find the sum of remaining two side of the triangle.

a) 15 cm
b) 2 cm
c) 30 cm
d) None of these

MATHEMATICAL REASONING

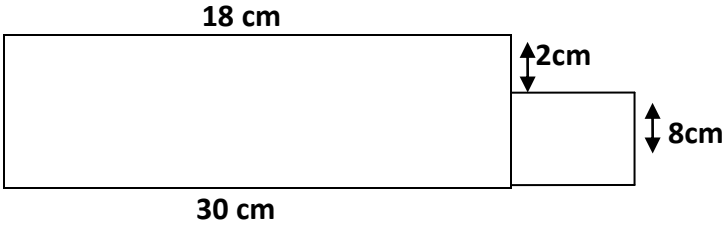
6) There are 15 rows of trees in a park. Each rows has 245 trees. Trees of 4 rows are cut down. Find the total number of remaining trees in the park.

a) 3675
b) 980
c) 4655
d) 2695

7) Lina bought a second hand watch for Rs.976.75 and her overhead expense was Rs.50.25. She sold it for Rs.1037.75. What was her gain or loss?

a) Rs.8.35 loss
b) Rs.15.10 loss
c) Rs.10.75 gain
d) Rs.25.25 gain

8) The given figure is made up of two rectangles. Find its total area.



a) 144 sq.cm
b) 216 sq.cm
c) 240 sq.cm
d) 300 sq.cm

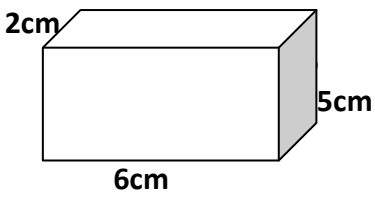
9)Look at the following table:

Books	Price
Mathematics	Rs.75
English	Rs.60
Physics	Rs.60
Chemistry	Rs.65
Biology	Rs.70

Riya buys 3 mathematics, 2 English, 2 Biology, 1 Chemistry and 5 Physics. How much money she has to pay?

a) Rs.730
b) Rs.850
c) Rs.630
d) Rs.550

10) Find the volume of the given figure.



a) 40 cu.cm
b) 60 cu. cm
c) 50 cu. cm
d) None of these

EVERYDAY MATHEMATICS

11) Four poles are stuck into the square ground of side 30 m at the four corners. A rope fence is to be put around the poles. What length of rope will be required if 2 m are required for tying the knots?

a) 120 m
b) 118 m
c) 122 m
d) None of these

12)How many hours are there in 1800 minutes?

a) 4 hours
b) 30 hours
c) 300 hours
d) 3 hours

13) Mrs Shreya had 15.65 m of ribbon. She cut 7 smaller pieces each of length 0.35 m from it. How many metres of ribbon were left?

a) 13.2 m
b) 14.7 m
c) 8.85 m
d) 17.5 m

14)The length of the rectangle is 4 cm more than breadth of the rectangle. If length of the 8 cm, find the area of the rectangle.

a)28 sq.cm
b) 30 sq.cm
c) 32 sq.cm
d) None of these

15)Neha weighs 35.4 kg and Manju weighs 42.9 kg. If Ashish, Neha and Manju weighs 117 kg altogether, then what is Ashish's weight?

a) 38 kg
b) 38.9 kg
c) 38.7 kg
d) 38.6 kg

ACHIEVERS SECTION (HOTS)

16) If X = 25, Y = 30, Z = 50 and 5A = 2(X + Y + Z), find the value of A.

a) 40
b) 42
c) 45
d) 48

17) The given figure is made up of a square and a rectangle. The breadth of a rectangle is one-third the length of the edge of the square. If the area of the whole figure is 384 sq.cm. Find the length of the rectangle.

a) 12 cm
b) 6 cm
c) 10 cm
d) 9 cm

18) A blue ribbon 2m 98cm long was half as long as a red ribbon. Jyoti used $1\frac{2}{5}$ m of the red ribbon to tie a parcel. She then cut the rest of the red ribbon into four equal pieces. Calculate the length of each remaining piece of red ribbon.

a) 114 m
b) 0.28 m
c) 1.14 m
d) 28 m

19)If, M= 34, O= 23, N= 45, K= 21, E= 7, Y= 24, then what is the value of M + 0 – N x K ÷ E + Y?

a) 7256
b) -45
c) -345
d) -54

20) Match the following:

1. 100m x 100m	**a. Area of rectangle**
2. 10m x 10m	**b. 1 hectare**
3. length x breadth	**c. Area of square**
4. side x side	**d. 100 sq.m**

Which statement is correct?

a) 1-a, 2-b, 3-c, 4-d
b) 1-b, 2-d, 3-a, 4-c
c) 1-d, 2-a, 3-b, 4-c
d) 1-c, 2-d, 3-a, 4-b