Cosmo School

Class – 7

Revision Worksheet

Date – 19/08/2020

Chapter – 1

Rational & Irrational Number

MCQ

1. Which one of the following is the square root of $\frac{289}{361}$?

a) $\frac{13}{19}$ b) $\frac{17}{19}$ c) $\frac{19}{13}$ d) $\frac{19}{17}$

2. Which one of the following is the square root of 1.1025?

a) 1.5 b) 1.005 c) 1.05 d) 0.05

3. A rational number is –

1)0 2)5 3)$\frac{5}{2}$

Which one of the following is correct?

a) 1 b) 2 c) 2 & 3 d) 1, 2 & 3

The difference of square of two consecutive number is 19.

Answer to question no. 4 and 5 following the information:

4. If one of the number is 10, what is the other number?

a) 12 b) 11 c) 9 d) 8

5. What is sum of total of squares of the two numbers?

a) 181 b) 221 c) 164 d) 144

6. Which of the following is the square root of 0.01?

a) 0.01 b) 0.1 c) 0.2 d) 1

7. If the digit in unit place of a number is either 2 or 8, the digit in unit place of its square will be-

a) 2 b) 4 c) 6 d) 8

8. By which number the multiplication or division of $3 \times 7 \times 5 \times 7 \times 3$ will be perfect square number?

a) 3 b) 5 c) 7 d) 11

9. Which one of the following is irrational number?

a) $\sqrt{2}$ b) $\sqrt{9}$ c) $\sqrt{16}$ d) $\sqrt{25}$

10. Which one of the following is the square root of 50.6944?

a) 7.22 b) 7.12 c) 7.13 d) 7.14

11. Which one of the following is the square root of $\frac{144}{289}$?

a) $\frac{12}{17}$ b) $\frac{12}{289}$ c) $\frac{144}{13}$ d) $\frac{19}{17}$

12. Which one of the following is the square root of 1.21?

a) 1.01 b) 1.10 c) 1.11 d) 1.110

13. Which one of the following is the square root of 1.1025?

a) 1.15 b) 1.10 c) 11.5 d) 1.05

14. What is the length of sides of square if the area of the square is a^2?

a) a b) 2a c) 3a d) 4a

15. What is called the product of a number and itself?

a) Square root b) Square c) Cube root d) Cube

16. If the numerator and denominator of a fraction is perfect square then the fraction is called –

a) Square root fraction

b) Perfect square root

c) Cube root fraction

d) Square fraction

17. What is the square root of $\frac{1}{49}$?

a) $\frac{1}{7}$ b) $\frac{1}{8}$ c) $\frac{1}{9}$ d) $\frac{1}{6}$

18. One garden has 8 rows of trees. How many trees are needed to plants 8 trees in each row?

a) 16 b) 46 c) 64 d) 61

19. What is the square root of 97969?

a) 303 b) 313 c) 323 d) 333

20. What is the square root of $7\frac{6}{25}$?

a) $8\frac{1}{5}$ b) $8\frac{1}{7}$ c) $8\frac{1}{8}$ d) $8\frac{2}{5}$

Creative Question

1. 21952 and 5605 are two numbers.

a) Give reason whether the first number is perfect square number.

b) If the first number is not perfect square number, what is the least number by which it is divided to get a perfect square number?

c) What is the least number to be added to the second number so that total sum is a perfect square number?

2. A farmer buys 595 plants for making a garden. The price of each plant is Tk. 12

a) How much money did he spend to buy the plants?

b) How many of the plants will be left if number of plants in each row of the garden is equal to number of rows?

c) What is the least number which is to be added to the difference of the number of spending of total taka and the number of plants so that the sum will be a perfect square number?

3. A troops can be arranged in 5, 6 and 9 rows, but not is a square form.

a) Find out factors of 8.

b) What is the least number by which the number in troops is to be multiplied so that the troops can be arranged in a square form?

c) At least how many troops should have to join to arrange troops so obtained in a square form?

4. 384 and 2187 are two numbers.

a) Verify with factors whether the first number be perfect square number.

b) If the second number is not perfect square number, what is the least number to be multiplied to get a perfect square number? What is the perfect square number?

c) What is the best number to be added to the second number so that the total sum is a perfect square number?

5. An army team can be arranged in 4, 5, 9 rows but they cannot be arranged in a square shape.

a) What are the factors of 9?

b) By which smallest number the total number of the soldiers should be multiplied to arrange the army in a square?

c) At least how many soldiers should join the troop to arrange them in a square?

6. The monthly expenditure of each students of a hostel is ten times of the number of students living in that hostel. Monthly expenditure is Tk. 9000 in that hostel.

a) Consider the number of students is x, express the monthly expenditure in terms as x.

b) Find the number of students of that hostel.

c) At least how many students should be left to arrange them in a square?

7. A farmer has 535 mango trees and 1156 coconut trees. He wants to plant equal number of trees along the length and the width of the garden.

a) How many trees does the farmer have?

b) If he plants coconut trees in his garden, find the number of coconut trees in each row.

c) How many more mango trees will he require to plant equally in each row along length and width?

8. 4056, 7601 and 677894 are three numbers.

a) What is the smallest number that divides 4056 to make it perfect square?

b) what is the smallest number subtracted from 7601 to make it perfect square? What is the number?

c) What smallest number is added with 677894 to make it perfect square?

9. In a class each gives 5 paisa so the total taka is Tk. 245.

a) Let students number is ‘a’ and express the total taka in term of a.

b) What is the number of student?

c) How many students should be admitted to make a perfect square?

10. 361, 23805 and 1006009 three numbers.

a) Find out the square root of 361 using factors.

b) Which number must be multiplied with 23805 to make it perfect square?

c) Find out the square root of 1006009 using division method?

11. 0.00005625 and 12.21 are two decimal fractions.

a) Express 0.00005625 in terms of $\frac{a}{b}$; where a and b are integer and there is no common factor between them expect 1.

b) Find out the square root of 0.00005625.

c) Find out the square root of 12.21 upto three decimal place.

12. 802.5889 and 0.047 are two decimal fractions.

a) Express 0.047 in denominator of 1000.

b) Find the square root of 802.5889.

c) Find out the square root of 0.047 up to two decimal place.