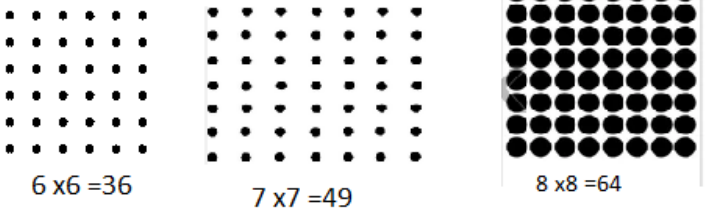
THE VILLAGE
INTERNATIONAL SCHOOL
"We Nurture Dreams"

QUESTION BANK GRADE -5 SUBJECT: MATHEMATICS

(ANSWER KEY)

1)Draw dots to show square numbers :

a) 6x6 b) 7x7 c)8x8



2) There are 25 students in a class. The teacher wants to arrange them in a square. What is the number of students in the rows and columns? If she wants more students, what is the minimum number of students required?

Ans: Number of students in rows and column= 5

Number of students required = 11

3) Complete the pattern:

a) 1,4,9,……. ,……, ……. b)1,3,6,10 ,……, ……., …….

Ans: a) 16,25,36 b) 15,21,28

4) Write down i) any 4 square numbers. Ii) any 4 triangle numbers.

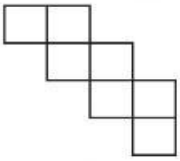
Ans: i) 16,25,36,49 ii) 3,6,10, 15,21

5)Look at the pattern and fill up :

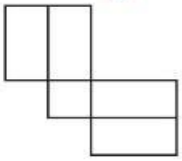
a) 40,55,70,---- , ------, -------

Ans: 85, 100, 115

Find the error in each net for a closed object.

a. 

cube

b. 

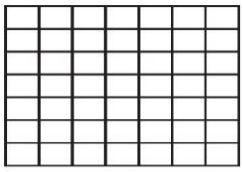
cuboid

a) There is an additional square b) one square is less here.

6)

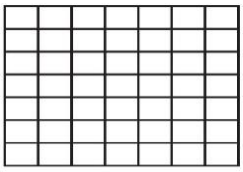
Shade the squares to show the given patterns.

a. $1 + 3 + 5 + \_\_ = \_\_$



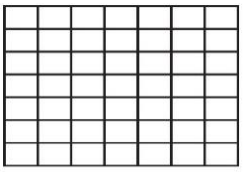
____ is a square number.

b. $1 + 3 + 5 + \_\_ + \_\_ = \_\_$



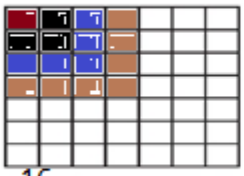
____ is a square number.

c. $1 + 3 + 5 + \_\_ + \_\_ + \_\_ = \_\_$



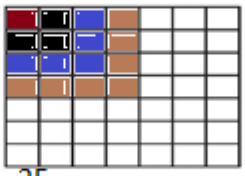
____ is a square number.

a. $1 + 3 + 5 + 7 = 16$



16 is a square number.

b. $1 + 3 + 5 + 7 + 9 = 25$



25 is a square number.

c. $1 + 3 + 5 + 7 + 9 + 11 = 36$

36 is a square number.

Ans:

7)Write down all the multiplication facts of the following numbers .

a) 36 b) 72 c)100

Ans:

1 x36 =36	1 x 72 =72	1 x 100 =100
2 x 18 =36	2 x 36=72	2 x 50= 100
3 x12 = 36	3 x24 =72	4 x 25 =100
4 x 9 = 36	4 x 18 =72	5 x 20 =100
6 x 6 =36	6 x12= 72	10 x10 =100
9 x4 =36	8 x9 =72	20 x5 =100
12 x 3= 36	9 x8 =72	25 x4 =100

18 x 2 =36 12 x6 =72 50 x2 =100

36 x1 =36 18 x4 = 72 100 x 1=100

24 x3 =72

36 x2 =72

72 x1 =72

8)Write down the first five multiples of the following numbers ;

a) 8 b) 18 c) 25

Ans: a) 8, 16,24,32,40 b) 18,36,54,72,90 c) 25,50,75,100,125

9) Write down the factors of the following .

a) 36 b) 72 c)100

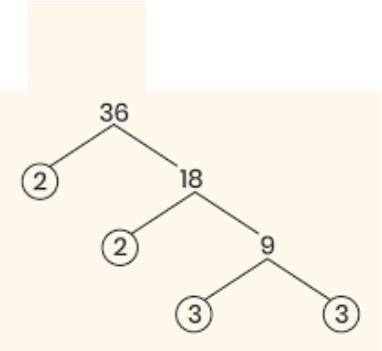
Ans:a) factors of 36 are 1,2,3,4,6,9,12,18,36

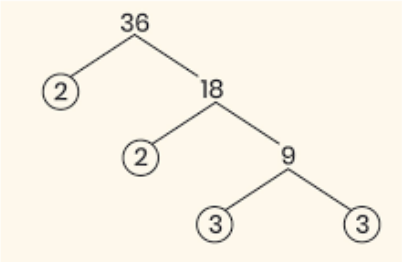
b)factors of 72 are 1,2,3,4,6,8,9,12,18,24,36,72

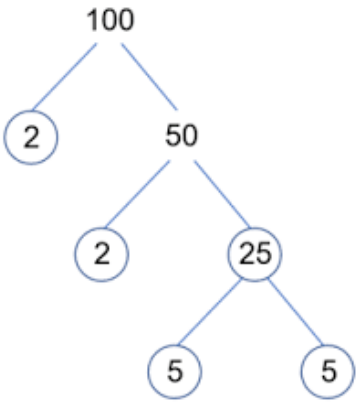
10)Draw the factor tree and find all the factors of the following numbers.

a) 36 b) 72 c)100

ans:







11)Write down i)the factors of each number ii) common factors of each numbers and iii) Highest Common Factor (H.C.F) of each of the following pair of numbers .

a) 56 ,16 b) 80, 128 c) 72 , 96

Ans:

i)factors of 56 = 1,2,4, 7,8,14,28,56

factors of 16 = 1,2,4,8,16

common factors of 56& 16 = 1,2,4,8

Highest common factor of 56 &16 = 8

ii) factors of 80 = 1,2,4,5,8,10,16,20,40,80

factors of 128 = 1,2,4,8,16,32,64,128

common factors of 80 & 128 = 1,2,4,8,16

Highest common factor of 80, &128 =16

iii) factors of 72 = 1,2,4, 6,8,9,12,18,36,72.

factors of 96 = 1,2,3,4,6,8,12,16,24,32,48,96

common factors of 72& 96 = 1,2,4,6,8,12

Highest common factor of 72 &96 = 12

12) Write down i) the first 10 multiples of each number ii) common multiples of each numbers and

iii) Lowest common multiple (L.C.M) of each of the following pair of numbers .

a) 6, 8 b) 8, 12 c) 15,18

Ans :

a) multiples of 6 are : 6,12,18,24,30,36,42,48,54,60…

multiples of 8 are : 8,16,24,32,40,48,56,64,72,80…

Common multiples of 6 and 8 are 24,48….

Lowest common multiple (L.C.M) = 24

b) multiples of 8 are : 8,16,24,32,40,48,56,64,72,80…

multiples of 12 are : 12,24,36,48,60,72,84,96,108,120..

Common multiples of 6 and 8 are 24,48,56,72,…..

Lowest common multiple (L.C.M) = 24

c)) multiples of 15 are : 15,30,45,60,75,90,105,120,135,150..

multiples of 18 are : 18,36,54,72,90,108,126,144,162180.

Common multiples of 15 and 18 are 90, …..

Lowest common multiple (L.C.M) = 90

3)Find the greatest number that will exactly divide 300 and 120.

Ans: Here we fin the H.C.F of 300 and 120

factors of 300 = 1,2,3,4,5,6,10,12,15,20,25,30,50,60,75,100,150,300..

factors of 120 = 1,2,3,4,5,6,8,10,12,15,20,24,30,40,60,120.

common factors of 300 & 120 = 1,2,3,4,5,6,8,10,12,15,20,30,60.

Highest common factor of 300 & 120 = 60 .

14) Find the smallest number that can be exactly divided by 33 and 22.

Here we find the L.C.M of 33 and 22.

Ans; multiples of 33 are : 33,66,99,132, 165, …

multiples of 22 are : 22,44,66,88,110,132,154,176,

Common multiples of 33 and 22 are 66,132,……..

Lowest common multiple (L.C.M) = 66

15)What are prime numbers below 15?

Ans:2,3,5,7,11,13.

16) What do you mean by composite numbers ?

Ans: The numbers greater than 2 which have more than two factors are called composite numbers.

17) Which is the smallest prime number?

Ans:2

18) Fill in the blanks:

Ans:

a)The common factor(s) of 2 and 11 will be : ..1…

b) The common factor(s) of 9 and 49 will be: …1….

c) The common factor(s) of 6 and 54 will be :….1,2,3,6….

d)The five common multiples of 6 and 8 are : …24,48,72,96,120

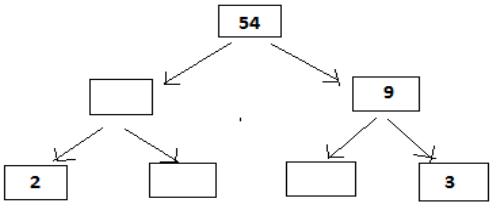
e) The five common multiples of 5 and 7 are ……..

5,10,15,20,25,30,35,40,45,50,55,60,65,70,…….

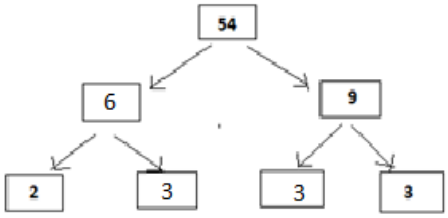
7,14,21,28,35,42,49,56,63,70…….

5 Common multiples of 5 and 7 are 35,70,105,140,175.

19) Complete the factor tree of 54



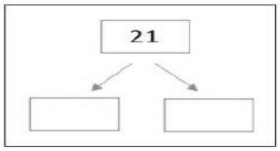
Ans:



20)

Complete the factor tree.

1.



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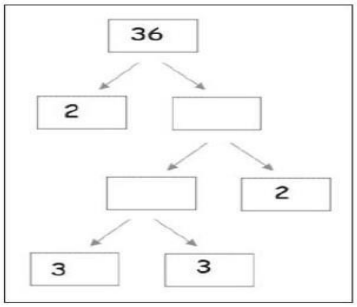
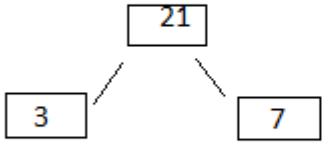
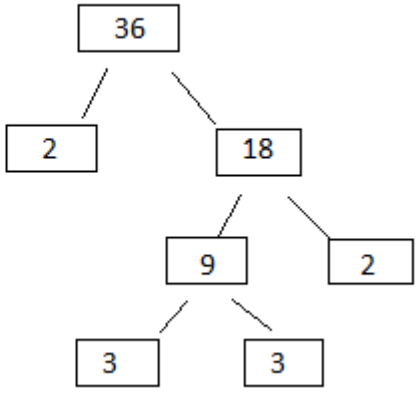






21)There vare 6 balloons in each bunch. How many balloons will be there in the given number of bunches?

Ans: a) 5 bunches : 5 x 6 =30… b) 12 bunches : 12 x6=72… c)36 bunches :36 x 6=216 ……

22) Circle the prime numbers from the given list of numbers.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50

Ans:2,3,5,7,11,13,17,19,23,29,31,37,41,43,47,

23) Kanchana walks 30 steps a minute and madhavi walks 40 steps in a minute .If they are walking at the same time ,after how many minutes will they meet?

They are walking with different speed and madhavi takes longer steps.

So they will never meet each other as Madhavi is always ahead.

24))Mohan cleans the garden every second day.He collects the fruits and vegetables from his garden every third day.When will he do both after the first time, if both starts at the same time?

Here we have to calculate the L.C.M of 2 and 3.

Multiples of 2 are: 2,4,6,8,10,12,14,1,6,18,20

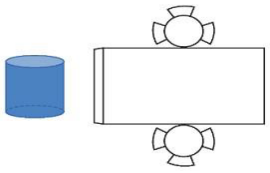
Multiples of 3 are 3,6,9,12,15,18,21,24,27,30

Common multiples of 2 and 3 = 6,12,18

Least common multiple of 2 and 3 =6

He will do both for the first time in 6^{th} day.

25) Identify whose net is it:



Ans: cylinder.