

**INDIAN SCHOOL AL WADI AL KABIR**

**Class VI**, Mathematics

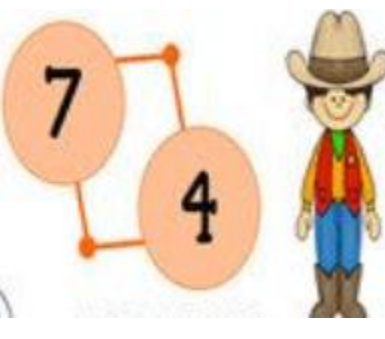
**TOPIC-Summer Holiday Homework(2022-23)**

**Read the questions carefully and answer the following:**

**Q.1.**  Observe the tree diagram and fill the empty boxes accordingly.

**Q2.** Complete the table by checking using divisibility rules. (Write Yes/No in the blank space)

Number	Divisible by 2	Divisible by 3	Divisible by 6
a) 12930			
b) 390769			
c) 810654			

**Q3.**  Write the first common multiple of the numbers seen in the figure.

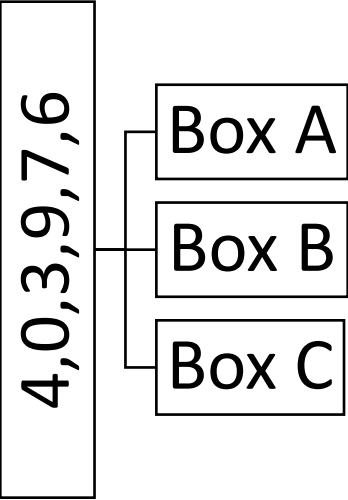
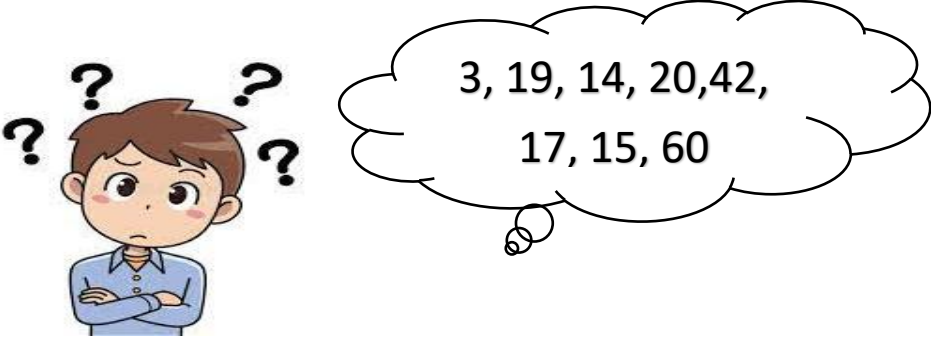
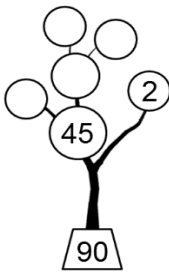
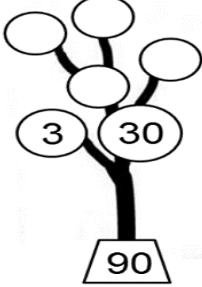
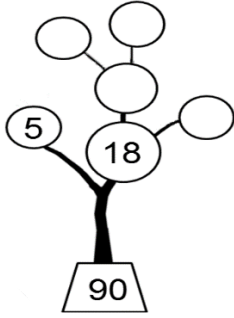
**Q4.** Find all the factors of the greatest composite number between 10 and 20.

**Q5.** Check whether 8973954 is divisible by 11 or not? Show the steps.

**Q6.** Check using divisibility rules if 1567824 is

- a) divisible by 4
- b) divisible by 8

State the reasons.

<p><b>Q.7</b></p>		<p>The vertical box contains 6 numbers. Find the numbers represented by the box A, box B and box C if,</p> <ol style="list-style-type: none"> <li>Box A represents the greatest 6-digit number using the numbers in the vertical box.</li> <li>Box B represents the smallest 6-digit number using the numbers in the vertical box.</li> <li>Box C represents the difference between the numbers in Box A and Box B.</li> </ol>
<p><b>Q.8</b></p>	 <p>Raju is confused, can you help Raju to answer the following questions?</p> <ol style="list-style-type: none"> <li>Make any three pairs of co-prime numbers using the numbers in the cloud given above.</li> <li>Find three prime numbers in the above cloud.</li> <li>Choose a pair of twin primes from the given numbers in the cloud.</li> </ol>	
<p><b>Q.9</b></p>	<p>Find the common factors of the following pairs of numbers.</p> <ol style="list-style-type: none"> <li>12 and 18</li> <li>14 and 28</li> </ol>	
<p><b>Q.10</b></p>	<p>The given figures show the factor tree for 90 in 3 different ways. Find the numbers in the empty circles.</p> <div style="display: flex; justify-content: space-around; align-items: flex-end;"> <div style="text-align: center;">  <p>A)</p> </div> <div style="text-align: center;">  <p>B)</p> </div> <div style="text-align: center;">  <p>C)</p> </div> </div>	

**Q.11**

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graph TD
    A[1) _____] --- B[First 3 multiples of 7]
    B --- C[2) _____]
    B --- D[3) _____]
  
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Fill in the empty boxes.

**Q.12** Fill in the blanks by choosing the correct options from the brackets.

a) Co-prime numbers are always prime numbers \_\_\_\_\_ (True/False)

b) The number of factors of a given number is \_\_\_\_\_ (finite/infinite).

c) If a number is divisible by two co-prime numbers, then it is divisible by their \_\_\_\_\_ (product/sum) also.

**Q.13** Write the prime factorisation of the

a) smallest 4-digit number (by division method)

b) greatest 4-digit number (by factor tree method)

**Q.14** Identify the property of whole numbers used in the following statements:

a)  $110 + (125 + 275) = (110 + 125) + 275$

b)  $11 \times 120 + 11 \times 80 = 11 \times (120 + 80)$

**Q 15** Solve using suitable property of whole numbers. State the property used.

a)  $891 \times 28 + 72 \times 891$

b)  $1352 \times 180 - 1352 \times 80$

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<b>Answers</b>	<b>Q.1</b>	=2 ×2× 2×6 =2×2×2×2×3	<b>Q.2</b>	a) Yes, yes, yes b) No, No, No c)Yes, yes, yes	<b>Q.3</b>	28	<b>Q.4</b>	Factors of 18: 1,2,3,6,9,18
	<b>Q.5</b>	Yes	<b>Q.6</b>	a) Yes; 24 is div by 4 b)824 is divisible by 8	<b>Q.7</b>	a)976430 b)304679 c)671751	<b>Q.8</b>	i) (3,14), (17,19),(17,42) ii) 3, 17,19 iii) 17,19
	<b>Q.9</b>	a)1,2,3,6 b)1,2,7,14	<b>Q10</b>	A) (3,15), (3,5) B) (3,10), (2,5) C) (2,9), (3,3)	<b>Q11</b>	1)7 2)14 3)21	<b>Q12</b>	a) False b) finite c)product
	<b>Q13</b>	a)1000=2×2 ×2×5×5×5 b)9999=3×3 ×11×101	<b>Q14</b>	a) Associativity of addition b) Distributivity of multiplication over addition	<b>Q15</b>	a)89100 b)135200		