Brain International School
Vikas Puri, New Delhi

SUBJECT: MATHEMATICS **CLASS:VIII** **NOVEMBER 2026**

COMPUTATIONAL THINKING WORKSHEET

Chapter 5: NUMBER PLAY

1. A, B, C, D, and E are five distinct whole numbers, with 16 as the smallest number. When arranged in ascending order, the difference between any two consecutive numbers is 8.
- **It is given that D is the greatest number and A is the least**
- **Also, B is greater than E but less than C**

Which of the following numbers is definitely divisible by 32?

a) A **b) B** **c) C** **d) E**

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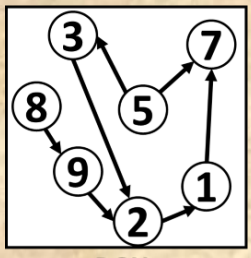
2. A control panel has three bulbs - A, B, and C. Each bulb is associated with one fixed divisor (greater than 3). A bulb glows whenever the entered number is divisible by its own divisor. A technician tested the panel with several numbers and noted which bulbs glowed, as shown in the table below.
Using this information, if 56 is entered, which bulb(s) will glow?

Number entered	Bulbs that glow
12	A,B
16	B
35	C
42	A,C
18	A

a) A and C **b) Only B** **c) B and C** **d) A and B**

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3. Using the digits shown in the Box, form the largest possible 6-digit number that is divisible by 9 (without repeating the digits). In the number formed, which place values contain digits that point to a greater digit than themselves in the box?



BOX

a) Hundreds and Ones **b) Ones and Tens** **c) Thousands and Tens** **d) Ones and Thousands**

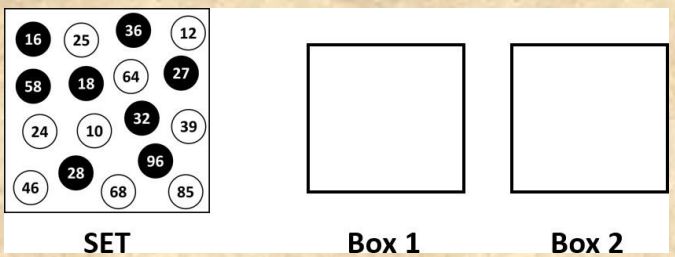
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4. Sam has two different two-digit numbers such that:
- Both numbers are divisible by 9
- None of the numbers is a multiple of 18
What is the LEAST possible sum of the two numbers?

a) 45 **b) 72** **c) 63** **d) 54**

5. **The numbers of the SET will be distributed to the Box 1 and Box 2, based on the conditions given below:**
   - **If the number is a multiple of 4 it goes to Box 1**
   - **If the number is a multiple of 6 it goes to Box 2**
   - **If the number is a multiple of both 6 and 4 it goes in both the boxes**

   Find the ratio of the number of BLACK CIRCLES in Box 1 to the number of WHITE CIRCLES in Box 2, finally.



a) 2:1 **b) 3:2** **c) 5:2** **d) 5:3**

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6. **Ashish and Devika together choose two different numbers from 2 to 24 (both inclusive). The chosen numbers are multiplied, and the product is divided by 25. The remainder decides the result:**
   - **If the remainder is less than 10, Devika wins**
   - **If the remainder is more than 14, Ashish wins**
   - **In all other cases, the game is a draw**

   What is the minimum possible sum of the numbers chosen by Ashish and Devika such that Ashish wins the game?

a) 7 **b) 8** **c) 9** **d) 6**

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7. **On the six faces of a die, even numbers from 2 to 12 are written.**
   - **All multiples of 4 are written on adjacent faces such that no two of these faces are opposite to each other**
   - **The sum of the numbers on any two opposite faces is always greater than 10 Which of these pairs are written on opposite faces?**

a) 8 and 10 **b) 12 and 6**

c) 2 and 12 **d) Cannot be determined**

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8. **In the year 2020, Simran's age was a multiple of 6. In the year 2024, her age was a multiple of 11. Which of the following could possibly be the age of Simran in the year 2024?**

a) 11 years **b) 22 years** **c) 33 years** **d) 44 years**

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9. **The middle number of 5 consecutive even numbers is 5p. Exactly two numbers in the sequence are divisible by 4, and only one is divisible by 5. Among the following values, which could be the possible value of p.**

a) 2 **b) 3** **c) 4** **d) 5**

10. A cryptarithmetic multiplication is shown below. Here, P, Q, M, and N are distinct single-digit natural numbers. MN represents a two-digit number, and PQN represents a three-digit number. What is the smallest possible value of P + M?

$$\begin{array}{r} MN \\ \times\ 6 \\ \hline PQN \end{array}$$

a) 3 **b) 1** **c) 4** **d) 5**



The Thinking Spot

There are 9 switches in a row on a switchboard. 3 of them belong to lights and the remaining are of fans.
Every two consecutive light switches have exactly two fan switches between them. The switch at the extreme right is NOT a light switch and the switch at the extreme left is NOT a fan switch.
Which of them is definitely a light switch?

(a) 2nd switch from the left
(b) 3rd switch from the left
(c) 6th switch from the right
(d) 5th switch from the left

