

Board – ICSE

Class –VIII

Topic – Playing with Numbers

1. If  $42x5$  is a multiple of 9 and  $x$  is a digit, then find the value of  $x$ .
2. If  $3x12$  is a multiple of 3 and  $x$  is digit, then find the value of  $x$ .
3. The usual form of the number  $9 \times 100 + 7 \times 1$
4. In the following problem, replace the letters of the English alphabet by digits (two or more letters may have the same value) to complete the procedure of division.
5. Find the values of the letters A, B and C if

$$\begin{array}{r} 4A \\ +98 \\ \hline CB3 \end{array}$$

$$\begin{array}{r} 5C \\ 9 \overline{) 4AB} \\ \underline{-DE} \\ 3F \\ \underline{-GH} \\ 0 \end{array}$$

6. Find the value of the letter A if
7. Find the values of the letters A, B and C if

$$\begin{array}{r} AB \\ \times 6 \\ \hline BBB \end{array}$$

8. If  $24x$  is a multiple of 3, where  $x$  is a digit, what is the value of  $x$ ?
9. Check the divisibility of 34567 by 9.
10. Find the value of A in

$$\begin{array}{r} 3A \\ \times A \\ \hline 17A \end{array}$$

## Answer

1.  $x = 7$
2. Possible values of  $x$  are 0, 3, 6, 9
3. 907
4.  $F = 6$ . And so,  $C = 4$  and  $B = 6$ . Also,  $G = 3$ ,  $H = 6$ .
5.  $A = 5$ ,  $B = 4$ ,  $C = 1$ .
6.  $A = 6$
7.  $A = 4$  and  $B = 7$
8.  $x$  can take the values 0, 6, 9 and 3.
9. 34567 is not divisible by 9.
10.  $A = 5$