

ASSIGNMENT – 3(MATHEMATICS)

CLASS – 8

Copy the notes in your maths copy and then do the homework in the same copy.

CHAPTER - 5

PLAYING WITH NUMBERS

Puzzles:-

We have to find out which letters represent which digits.

- RULE –
- i) Each letter must stand for just one digit
 - ii) The first digit cannot be zero.

EXERCISE 5.2

Q. no. 1.

$$\begin{array}{r} 4 \quad A \\ + \quad 3 \quad 5 \\ \hline \end{array}$$

$$B \quad 2$$

Solution - $A + 5 = 12$

$$A = 12 - 5 = 7$$

$$1 + 4 + 3 = B$$

$$B = 8$$

Put the value of A & B,

Check the sum

$$\begin{array}{r} 4 \quad 7 \\ + \quad 3 \quad 5 \\ \hline \end{array}$$

$$8 \quad 2$$

Q. no. 6.

$$\begin{array}{rcccc} & A & 2 & 1 & B \\ + & 1 & C & A & B \\ \hline & B & 4 & 9 & 6 \end{array}$$

Solution -

$$B + B = 16$$

$$2B = 16$$

$$B = 8$$

$$1 + 1 + A = 9$$

$$A = 9 - 2 = 7$$

$$2 + C = 4$$

$$C = 4 - 2 = 2$$

Now put the value of A, B and C and check the puzzle

$$\begin{array}{rcccc} & 7 & 2 & 1 & 8 \\ + & 1 & 2 & 7 & 8 \\ \hline & 8 & 4 & 9 & 6 \end{array}$$

Q. no. 4.

$$\begin{array}{rcc} & A & A \\ + & A & A \\ \hline B & A & 8 \end{array}$$

Solution:-

$$A + A = 18$$

$$2A = 18$$

$$A = 9$$

Put the value of A and find the value of B

$$\begin{array}{r} 9 \quad 9 \\ + \quad 9 \quad 9 \\ \hline 1 \quad 9 \quad 8 \end{array}$$

Therefore, $B = 1$ and $A = 9$

Q. no. 10.

$$\begin{array}{r} \quad \quad A \quad B \\ X \quad A \quad B \\ \hline 6 \quad A \quad B \end{array}$$

Observe the unit column,

This can be possible when the value of B is either 0 or 5

$$\begin{array}{r} \quad \quad A \quad 5 \\ X \quad A \quad 5 \\ \hline 6 \quad A \quad 5 \end{array}$$

Let the value of $A = 2$

$$\begin{array}{r} \quad \quad 2 \quad 5 \\ X \quad 2 \quad 5 \\ \hline 6 \quad 2 \quad 5 \end{array}$$

(If we take $A = 1$

$$\begin{array}{r} \quad \quad 1 \quad 5 \\ X \quad 1 \quad 5 \\ \hline 2 \quad 2 \quad 5 \end{array}$$

Q. no. 12

A) 3 B C (5 D

- 3 0

5 C

- 5 C

X

Solution -

$$A \times 5 = 30$$

$$A = 6$$

$$3 B - 30 = 5$$

$$B = 5$$

When $D = 9$, $C = 4$

Q. no. 13 b)

3	14	A	0
8	D	6	B
4	E	C	7
G	F	1	12

Sum of each row, column and diagonal is 30

$$3 + 14 + A + 0 = 30$$

$$A = 30 - 17 = 13$$

$$\text{Again, } 0 + B + 7 + 12 = 30$$

$$B = 30 - 19 = 11$$

Similarly find the value of C, as we know that all the three values of its column (A=13, 6 and 1) and sum of column is 30.

So,

$$13 + 6 + C + 1 = 30$$

$$C = 30 - 20 = 10$$

Similarly, find the values of D, E, F and G

Home-work:

Exercise 5.2 question no. 2, 3, 5, 7, 8, 9, 11, 13(a)