<u>CHAPTER 5</u> <u>PLAYING WITH NUMBERS</u>

Find the values of the letters in each of the following and give reasons for the steps involved.

1.

+ 2 5 B 2

Solution:

Say, A = 7, and we get

7+5 = 12

In which one's place is 2.

Therefore, A = 7

And putting 2 and carrying over 1, we get

B = 6

Hence, A = 7 and B = 6.

2.

4	A
+ 9	8
CB	3

Solution:

If A = 5, we get

8+5 = 13, in which one's place is 3.

Therefore, A = 5 and carry over 1, then

B = 4 and C = 1

Hence, A = 5, B = 4 and C = 1.

1 x	A A	
9	A	

3.

Solution:

On putting A = 1, 2, 3, 4, 5, 6, 7 and so on, we get

 $AxA = 6 \times 6 = 36$, in which one's place is 6.

Therefore, A = 6

4.

	A	В
+	3	7
E	6	A
- 3		

Solution:

Here, we observe that B = 5, so that 7+5=12

Putting 2 at one's place and carrying over 1 and A = 2, we get

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2+3+1 =6 Hence, A = 2
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and **B** =5.

5.

A	В	
×	3	
CA	В	

Solution:

Here, on putting B = 0, we get 0x3 = 0.

And A = 5, then $5 \times 3 = 15$

A = 5 and C = 1

Hence A = 5, B = 0 and C = 1.

6.



Solution:

On putting B = 0, we get 0x5 = 0 and A = 5, then $5 \times 5 = 25$

A = 5, C = 2

Hence **A** = 5, **B** = 0 and **C** = 2

7.

A B × 6 B B B

Solution:

Here, products of B and 6 must be the same as one's place digit is B.

6×1 = 6, 6×2 = 12, 6×3 = 18, 6×4 = 24

On putting B = 4, we get the one's digit 4, and the remaining two B's value should be 44.

Therefore, for $6 \times 7 = 42 + 2 = 44$

Hence, A = 7 and B = 4.

8.

+ 1 B B 0

Solution:

On putting B = 9, we get 9+1 = 10

Putting 0 at ones place and carrying over 1, we get A = 7

7+1+1 =9

Hence, A = 7 and B = 9.

9.



Solution:

On putting B = 7, we get 7+1 = 8

Now A = 4, then 4+7 = 11

Putting 1 at tens place and carrying over 1, we get

2+4+1 =7

Hence, A = 4 and B = 7.

10.

+	6	A	В
	Δ	0	Q

Solution:

Putting A = 8 and B = 1, we get

8+1 = 9

Now, again we add 2 + 8 = 10

The tens place digit is '0' and carries over 1. Now 1+6+1 = 8 = A Hence,

A = 8 and B =1.