

Exercise 3B

Q5

Answer:

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(i) 6784 + 9999
= 6784 + (10000 - 1)
= (6784 + 10000) - 1
                                   (Using associative property of addition)
= 16784 - 1
= 16783
(ii) 10578 + 99999
= 10578 + (100000 - 1)
= (10578 + 100000) - 1
                             (Using associative property of addition)
= 110578 - 1
= 110577
Q6
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Answer:

For any whole numbers a, b and c, we have:

$$(a + b) + c = a + (b + c)$$

Let a = 2, b = 3 and c = 4 [we can take any values for a, b and c]

LHS =
$$(a + b) + c$$

= $(2 + 3) + 4$
= $5 + 4$
= 9

RHS = a + (c + b)= a + (b + c) [: Whole numbers follow the commutative law] = 2 + (3 + 4)= 2 + 7= 9

 \therefore This shows that associativity (in addition) is one of the properties of whole numbers.

Q7

Answer:

In a magic square, the sum of each row is equal to the sum of each column and the sum of each main diagonal. By using this concept, we have:

(i)		
4	9	2
3	5	7
8	1	6

(ii)			
16	2	12	
6	10	14	
8	18	4	

(iii)			
2	15	16	5
9	12	11	6
13	8	7	10
14	3	4	17

(iv)			
7	18	17	4
8	13	14	11
12	9	10	15
19	6	5	16

Q8

Answer:

- (i) F (false). The sum of two odd numbers may not be an odd number. Example: 3 + 5 = 8, which is an even number.
- (ii) T (true). The sum of two even numbers is an even number. Example: 2 + 4 = 6, which is an even number
- (iii) T (true). The sum of an even and an odd number is an odd number. Example: 5 + 4 = 9, which is an odd number.

