3.4 Numbers in Expanded Form

Expanded form of a number can be obtained by breaking it and using the place value of digits in the number.

Example 1 : Write the expanded form of number 48.

4 8

8 ones ($8 \times 1 = 8$)

4 tens ($4 \times 10 = 40$)

Expanded form of number

$48 = 40 + 8$

Example 2 : Write the expanded form of number 90.

9 0

0 ones ($0 \times 1 = 0$)

9 tens ($9 \times 10 = 90$)

Expanded form of number

$90 = 90 + 0$

Exercise

Write the numbers given below in expanded form :

1. 26 = 20 + 6
2. 30 = 30 + 0
3. 39 = 30 + 9
4. 68 = 60 + 8
5. 79 = 70 + 9
6. 82 = 80 + 2
7. 98 = 90 + 8
8. 56 = 50 + 6
9. 67 = 60 + 7
10. 19 = 10 + 9
11. 73 = 70 + 3
12. 55 = 50 + 5
13. 59 = 50 + 9
14. 97 = 90 + 7
15. 16 = 10 + 6
16. 89 = 80 + 9
17. 74 = 70 + 4
18. 24 = 20 + 4
19. 78 = 70 + 8
20. 86 = 80 + 6
21. 90 = 90 + 0
22. 72 = 70 + 2
23. 36 = 30 + 6
24. 99 = 90 + 9

5.5 Numbers in Compact Form

The compact form of a number is written using the digits 0-9 according to their place value.

Example 1 : Write 80 + 7 in compact form.

80 + 7

- 7 → 7 ones
- 80 → 8 tens

Compact form of $\underline{8}0 + \underline{7} = 87$

Example 2 : Write 40 + 0 in compact form.

40 + 0

- 0 → 0 ones
- 40 → 4 tens

Compact form of $\underline{4}0 + \underline{0} = 40$

HW

Exercise

Write in compact form

1. 20 + 6 = 26
2. 30 + 6 = 36
3. 60 + 8 = 68
4. 30 + 8 = 38
5. 20 + 3 = 23
6. 40 + 7 = 47
7. 50 + 0 = 50
8. 00 + 2 = 2
9. 10 + 7 = 17
10. 60 + 2 = 62
11. 80 + 8 = 88
12. 50 + 2 = 52
13. 70 + 6 = 76
14. 60 + 4 = 64
15. 00 + 8 = 8
16. 00 + 1 = 1
17. 20 + 2 = 22
18. 60 + 6 = 66
19. 50 + 7 = 57
20. 60 + 9 = 69
21. 40 + 4 = 44
22. 30 + 3 = 33
23. 20 + 7 = 27
24. 30 + 9 = 39