

5.4 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. 25 = **20 + 5**

2. 32 = 30 + 2

3. 39 = 30 + 9

4. 66 = 60 + 6

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 ones

— 8 tens

Compact form of $80 + 7 = 87$

Example 2 : Write $40 + 0$ in compact form.

$$40 + 0$$

— 0 ones

— 4 tens

Compact form of $40 + 0 = 40$

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. $30 + 9 = 39$