

3.1 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 = $90 + 9$

1.8 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.

$$\begin{array}{r} 80 + 7 \\ \hline 7 \text{ ones} \\ 8 \text{ tens} \end{array}$$

Compact form of $\underline{80} + \underline{7} = 87$

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

$$\begin{array}{r} 40 + 0 \\ \hline 0 \text{ ones} \\ 4 \text{ tens} \end{array}$$

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

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