

4.8 Forming Two Digit Numbers Using the Given Digits

We form two digit numbers using digits, 0, 1, 2, 3, 4, 5, 6, 7, 8 and 9. There are two cases : They are —

- (1) Without repeating the digits, (2) With the digits repeating.

Example 1 : Form two digit numbers using the digits 2 and 3.

Answer :

Case (1) : Without repeating the digits. The numbers are 23 and 32.

Case (2) : With the digits repeating. The numbers are 22 and 33.

Example 2 : Form two digit numbers using the digits 4, 5 and 6.

Answer :

Case (1) : Without the digits repeating. The numbers are : 45, 46, 54, 56, 64 and 65.

Case (2) : With the digits repeating. The numbers are 44, 55 and 66.

Example 3 : Form two digit numbers using the digit 0, 1 and 2.

When we form two digit numbers, we have to place digit 0 at the ones place only. If we place 0 at tens place, the number will become a one digit number. e.g. 02, 01.

Case (1) : Without the digits repeating. The two digit numbers are :

10, 12, 21 and 20.

Case (2) : With the digits repeating. The two digit numbers are : 11 and 22.

Exercise

1. Form two digits numbers using the digits given below :

- (a) 1, 3 - 13, 31 (b) 6, 7 - 67, 76 (c) 8, 9 - 89, 98, 88, 99
 (d) 1, 2, 3 - 23, 32, 12 (e) 5, 6, 7 - 57, 57, 56, 65, 67 (f) 6, 7, 8 - 67, 76, 86, 87

2. Find the greatest and smallest number formed by the digits :

- (a) 4, 5 - 54, 45 (b) 3, 4, 5 - 34, 54 (c) 1, 2, 3 - 2, 13, 11
 (d) 5, 6, 7 - 56, 57, 67 (e) 7, 8, 9 - 78, 98 (f) 3, 0, 5 - 50, 30