## Count numbers third digit equals



Count numbers third digit equals 3

## Number



7365
1234
2456
2639
1000
1039
9678

## EXCELJET■

## Generic formula

```
= SUMPRODUCT( -- (MID(range, 3,1)= "3"))
```


## Summary

To count numbers where the third digit equals 3, you can use a formula based on the SUMPRODUCT and MID functions. In the example shown, the formula in E5 is:

```
= SUMPRODUCT( - - (MID(B5:B12, 3,1) = "3"))
```


## Explanation

To get the third character from a string in A1, you can use the MID function like this

$$
=\operatorname{MID}(A 1,3,1)
$$

The first argument is a cell reference, the second argument specifies the start number, and the third argument indicates number of characters.

If you give the MID function a range of cells for the first argument, you'll get back an array of results. In the example shown, this expression:

## MID(B5:B12, 3, 1)

returns an array like this:

```
{"6";"6";"3";"5";"3";"0";"3";"7"}
```

This array contains the third digit from each cell in the range B5:B12. Notice the MID function has automatically converted numeric values in the range to text strings and returned the third character as a text value.

When we compare this array using $=" 3$ ", we get an array like this:

```
{FALSE;FALSE;TRUE;FALSE;TRUE;FALSE;TRUE;FALSE}
```

We use the double negative to coerce the TRUE and FALSE values to 1 and zero respectively, which returns:

```
{0;0;1;0;1;0;1;0}
```

Finally, with only one array to work with, the SUMPRODUCT function sums the items in the array and returns the total, 3 .

