

```

ans =
    23
>> VCT(6)=273
VCT =
    35    46    78    23     5   273    81     3    55

>> VCT(2)+VCT(8)
ans =
    49

>> VCT(5)^VCT(8)+sqrt(VCT(7))
ans =
   134
>>

```

Assign a new value to the sixth element.

The whole vector is displayed.

Use the vector elements in mathematical expressions.

2.5.2 Matrix

The address of an element in a matrix is its position, defined by the row number and the column number where it is located. For a matrix assigned to a variable *ma*, *ma(k,p)* refers to the element in row *k* and column *p*.

For example, if the matrix is: $ma = \begin{bmatrix} 3 & 11 & 6 & 5 \\ 4 & 7 & 10 & 2 \\ 13 & 9 & 0 & 8 \end{bmatrix}$

then $ma(1,1) = 3$ and $ma(2,3) = 10$.

As with vectors, it is possible to change the value of just one element of a matrix by assigning a new value to that element. Also, single elements can be used like variables in mathematical expressions and functions. Some examples are:

```

>> MAT=[3 11 6 5; 4 7 10 2; 13 9 0 8]
MAT =
     3    11     6     5
     4     7    10     2
    13     9     0     8

>> MAT(3,1)=20
MAT =
     3    11     6     5
     4     7    10     2
    20     9     0     8

>> MAT(2,4)-MAT(1,2)
ans =
    -9

```

Create a 3×4 matrix.

Assign a new value to the (3,1) element.

Use elements in a mathematical expression.