

## Calculations and formulas

$$
z=x+y
$$

$$
z=x-y
$$

$$
z=x^{*} y
$$

$$
z=x / y
$$

$$
z=2 *(x-y)
$$

square SQR

## Relational operators

= equals
<less than
> greater than
<= less than equal
> = greater than
<> not equal

## View results

MsgBox "result is" \& z
Chr(13) to the next line

## Conditional command

If Condition Then
Commands 1
Else
Commands 2
End If

## Option for more conditions

If Condition 1 Then

## Commands 1

## Elself Condition 2 then

## Commands 2

...
Else
Commands n
End If

## Cycle

```
For variable = start To end [Step step]
```

[commands]
[Exit For]
[commands]
Next variable

## Example 1

Enter the radius of the circle and calculate the content and circuit of the circle.
Enter a radius of 5 m .
Result: The content is 78.5. The circuit is 31.4.

## Example 2

Enter the length and width of the land and the price for $1 \mathrm{~m}^{2}$. Calculate and display the area of land and the price of the land.

Enter length 50 m and width 70 m and price 0,5 euro $/ \mathrm{m}^{2}$. Content is 3500 m 2 . The price is 7000 euros.

## Examples 3

Enter price and quantity. Calculate and Display VAT (20\%), Price with VAT and Sales (Price with VAT * pcs).
For example price 100, pcs 20.
VAT is 20, Price with VAT 120 and Sales 2400.

## Examples 4

Enter time and track. Calculates speed in meter/second (m/s) and kilometer/hour (km/h).

## Examples 5

Enter the number and decide if is it positive or negative. (zero is positive)

## Examples 6

Enter side $A$ and side $B$. Deside if it is a square $A=B$ or a rectangle and calculate the content of the shape.
Try $A=6$ and $B=7$. This is a rectangle. Content is 42 .
Try $A=6$ and $B=6$. This is a square. Content is 36 .

## Examples 7

Enter the number X and decide if it is between 5 and 50 .
Help:
If $\mathrm{A}<=5$ and Number <= 50 Then
Try entering number 2. Number is not in interval
Try to enter the number 40. The number is in the interval.

## Examples 8

Enter two numbers $A$ and $B$. If $A$ is greater than $B$, calculate the difference and store it in variable $C$. If the numbers are equal, multiply the numbers and store in variable $C$. If $A$ is less than $B$, calculate their sum. Display the variable C.
Help

## Examples 9

Enter the number of produced pieces $(\mathrm{P})$ and the price per piece $(\mathrm{S})$ and calculate the amount of payroll tax according to the table. Displays salary and tax.

Salary employee
over 2500 Euro ................ 20\%
from 10000-25000 Euro $\qquad$ 15\%
up to 10000 Euro $\qquad$ 10\%

## Examples 10

Enter the speed and find out what penalty the driver will pay.
$50-70 \mathrm{~km} / \mathrm{h}$ $\qquad$ 50 euro

71 - 90 km / h... 100 euro
Over 90 km / h... 200 euro

Cycle
Examples 11
Enter 5 numbers. Sum of the numbers to display.

## Examples 12

Enter 4 times. Calculate and view average time.

## Examples 13

For numbers 1 to 5 , display the second power of the number.

## Examples 13

Find out how many of the 8 integers entered are greater than 0

## Examples 14

Enter 6 attempts by the athlete to throw the disc and find out which was the longest.

## Examples 15

Create a program that generates 5 numbers (numbers from 1 to 49 ). Display the numbers.

## Examples 16

Generate 10 numbers from 1 to 6 to view and see how many times the number " 6 " was generated.

