# **IVMath**

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## ivm\_fooTemplate

ivm\_fooTemplate - just a template for this document

### **Description**

blah blah blah...

#### **Parameters**

blah blah blah... blah blah blah...

#### **Return Values**

blah blah blah...

### **Examples**

blah blah blah...

## ivm moreOne

ivm\_moreOne - return next natural number

### **Description**

int ivm\_moreOne ( integer \$var )

#### **Parameters**

#### var

The input param

#### **Return Values**

Returns a natural number

## **Examples**

No example now.

# ivm\_lessOne

ivm\_lessOne - return last natural number

### **Description**

int ivm\_lessOne ( integer \$var )

### **Parameters**

#### var

The input param

#### **Return Values**

Returns a natural number

### **Examples**

No example now.

## ivm\_widthUnder256

ivm\_widthUnder256 - return a width value smaller than 256.

### **Description**

 $subwidth = ivm\_widthUnder256(x) = \frac{256}{2^x}, (x \ge 0)$ int ivm\_widthUnder256 (integer \$var)

#### **Parameters**

#### var

The input param

#### **Return Values**

Returns a new width number that smaller than 256 or equal 256

### **Examples**

No example now.

# ivm\_xyLeft

### **Description**

not available current

# ivm\_xyUp

### **Description**

not available current

# ivm\_xyRight

### **Description**

not available current

# ivm\_xyDown

### **Description**

not available current

# ivm\_xyzNextLevelLeftTop

### **Description**

not available current

# ivm\_xyzNextLevelRightTop

### **Description**

not available current

# ivm\_xyzNextLevelLeftBottom

### **Description**

not available current

# ivm\_xyzNextLevelRightBottom

### **Description**

not available current

## ivm\_sumArithmeticSequence

### **Description**

ivm\_sumArithmeticSequence(int \$start, int \$end, [int \$step = 1] )

#### **Parameters**

#### start

First number of the sequence.

#### end

The last number of the sequence.

#### step

Number of step, default is 1.

### **Return Values**

Result is 
$$S = \sum_{f(i)=start}^{end} f(i)$$

## **Examples**

$$\sum_{f(i)=1}^{4} 3i = 3 + 6 + 9 + 12 = 30$$

\$result = ivm\_sumArithmeticSequence(3, 12, 3);
print \$result; // Result is 30.