

## 1 **a + b (Numerical)**

Negligible

## 2 **a and b**

Negligible

## 3 **a as b**

x := number of items in a  
*TODO*

## 4 **avg(a)**

x := number of items in a  
 $0.171303 + 0.00296116x + 7.91336 \times 10^{-7}x^2$   
 $r^2 = 0.994094$

## 5 **bag(a)**

x := number of items in a  
 $-0.168636 - 0.000841481x + 0.0000299677x^2$   
 $r^2 = 0.999968$

## 6 **a + b (Strings)**

Negligible

## 7 **count(a)**

x := number of items in a  
*TODO*

**8**     $a_1, a_2, \dots, a_n$

$x := n$

$0.226851 - 0.00550817x + 0.0000146711x^2 + 4.80612 \times 10^{-8}x^3$

$r^2 = 0.840262$  Note: If  $x \geq 182$ , just use 0

**9**    **if(a)**

Negligible

**10**    **a contains b**

$x :=$  number of items in a

$0.0152971 - 0.00015426x + 6.87809 \times 10^{-7}x^2$

$r^2 = 0.906738$

**11**    **deref(a)**

$x :=$  number of times in a

*TODO*

**12**    **a / b**

Negligible

**13**    **a.b**

$x :=$  number of items in a

*TODO*

**14**    **a = b (Numerical)**

Negligible

## **15    $a = b$ (Strings)**

Negligible

## **16    $a.\text{exists}(b)$**

$x :=$  number of items in  $a$   
*TODO*

## **17    $\text{forall}(a)$**

$x :=$  number of items in  $a$   
*TODO*

## **18    $\text{forsome}(a)$**

$x :=$  number of items in  $a$   
*TODO*

## **19    $a \text{ ; } b$**

Negligible

## **20    $a \text{ ; } = b$**

Negligible

## **21    $a \text{ groupas } b$**

$x :=$  number of items in  $a$   
*TODO*

## 22 a in b

x := number of items in b  
*TODO*

## 23 a[b]

x := number of items in a  
*TODO*

## 24 a[b]

x := b  
*TODO*

## 25 a intersect b

x := number of items in b  
*TODO*

## 26 a join b

x := number of items in b  
 $-0.296612 + 0.0033636x + 0.0000845375x^2$   
 $r^2 = 0.99998$

## 27 a ; b

Negligible

## 28 a ;= b

Negligible

## **29    `max(a)`**

x := number of items in a  
*TODO*

## **30    `min(a)`**

x := number of items in a  
*TODO*

## **31    `a % b`**

Negligible

## **32    `a * b`**

Negligible

## **33    `-a`**

Negligible

## **34    `a <> b (Numerical)`**

Negligible

## **35    `a <> b (Strings)`**

Negligible

## **36    `now()`**

Negligible

### **37    a or b**

Negligible

### **38    a orderby b (b ::= date)**

x := number of items in a  
*TODO*

### **39    a orderby b (b ::= enum)**

x := number of items in a  
*TODO*

### **40    a rangeas b**

x := number of items in a  
*TODO*

### **41    ref(a)**

x := number of items in a  
*TODO*

### **42    a ~~ b**

x := length of b

$$f(x) = \begin{cases} 0.676408; & x < 103 \\ 2.00131; & x \geq 103 \end{cases}$$