$1 \quad a + b$ (Numerical)

Negligible

2 a and b

Negligible

3 a as b

Negligible

4 avg(a)

x := (number of items in a) - 1 $0.171303 + 0.00296116x + 7.91336 \times 10^{-7}x^2$ $r^2 = 0.994094$

5 bag(a)

$$\begin{split} \mathbf{x} &:= \text{(number of items in a) - 1} \\ -0.168636 - 0.000841481x + 0.0000299677x^2 \\ r^2 &= 0.999968 \end{split}$$

6 a + b (Strings)

Negligible

7 count(a)

8 $a_1, a_2, ..., a_n$

x := n - 1

 $0.226851 - 0.00550817x + 0.0000146711x^2 + 4.80612 \times 10^{-8}x^3$ $r^2 = 0.840262$ Note: If x < 182, just use 0

9 if(a)

Negligible

10 a contains b

$$\begin{split} \mathbf{x} &:= \text{(number of items in a) - 1} \\ -0.0438918 + 6.17165 \times 10^{-7} x^2 \\ r^2 &= 0.906365 \end{split}$$

11 deref(a)

Negligible

12 a / b

Negligible

13 a.b

Negligible

$14 \quad a = b$ (Numerical)

15 a = b (Strings)

Negligible

16 a.exists(b)

Negligible

17 forall(a)

 $\mathbf{x} := \text{(number of items in a)} - 1$ 0.368536 + 0.000115264x $r^2 = 0.53822$

18 forsome(a)

 $\begin{aligned} \mathbf{x} &:= \text{(number of items in a) - 1} \\ -0.0183684 + 6.63148 \times 10^{-7} x^2 \\ r^2 &= 0.912927 \end{aligned}$

$19 \quad a > b$

Negligible

$$20$$
 a >= b

Negligible

21 a groupas b

 $\begin{aligned} \mathbf{x} &:= \text{(number of items in a) - 1} \\ -0.00591995 + 2.01902 \times 10^{-7} x^2 \\ r^2 &= 0.316911 \end{aligned}$

22 a in b

Same as contains

23 a[b]

Negligible

24 a[b]

x := bTODO

25 a intersect b

Negligible

26 a join b

x := (number of items in a) + (number of items in b) - 5 $0.993985 + 0.0000860779x^2$ $r^2 = 0.999971$

$27 \quad a < b$

Negligible

29 max(a)

 $\begin{aligned} \mathbf{x} &:= \text{(number of items in a) - 1} \\ -0.00206558 + 0.0000179761x \\ r^2 &= 0.00486482 \end{aligned}$

30 min(a)

x := (number of items in a) - 1 $0.247735 - 0.00106815x + 9.2684 \times 10^{-7}x^2$ $r^2 = 0.794276$ Note: if x ; 831, just use 0.

31 a % b

Negligible

32 a * b

Negligible

33 -a

Negligible

34 a \ll b (Numerical)

Negligible

36 now()

Negligible

37 a or b

Negligible

38 a orderby b

 $\mathbf{x} := \text{(number of items in a)} - 1$ -10.0698 + 0.893485x $r^2 = 0.999835$

39 a rangeas b

Negligible

40 ref(a)

Negligible

41 a $\sim \sim$ b

x := length of b

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

42 struct(a)

 $\begin{aligned} \mathbf{x} &:= \text{(number of items in a) - 1} \\ 4.00191 + 0.0000150654x^2 \\ r^2 &= 0.83345 \end{aligned}$

43 a - b

Negligible

44 a subtract b

Negligible

45 sum(a)

```
 \begin{aligned} \mathbf{x} &:= \text{(number of items in a) - 1} \\ -0.161127 + 0.00383586x \\ r^2 &= 0.989362 \end{aligned}
```

46 a union b

```
x := (number of items in a) + (number of items in b) - 4
0.195218 - 0.000825259x + 8.05861 × 10^{-7}x^2
r^2 = 0.791186 Note: If x i 654, just use 0
```

47 unique(a)

Negligible

48 uniqueref(a)

Negligible

49 a where b

 $\mathbf{x} := (\text{number of conditions in b}) - 1$ TODO