

1 **a + b (Numerical)**

Negligible (Values too low)

2 **a and b**

Negligible (Values too low)

3 **a as b**

Negligible (Trend goes down)

4 **avg(a)**

$x := (\text{number of items in } a) - 1$

$0.171303 + 0.00296116x + 7.91336 \times 10^{-7}x^2$

$r^2 = 0.994094$

$p = \{5.86788 \times 10^{-11}, 3.72525073025 \times 10^{-361}, 1.20718 \times 10^{-150}\}$

5 **bag(a)**

Negligible (Trend goes down)

$p = \{0.215747, 3.08592 \times 10^{-19}\}$

6 **a + b (Strings)**

Negligible (Values too low, p too high)

$p = \{0.635993, 0.588993\}$

7 **count(a)**

Negligible (Values too dispersed)

$p = \{0.374396, 0.368428\}$

8 a_1, a_2, \dots, a_n

$x := n - 1$

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

$r^2 = 0.840262$

$p = \{0.00474814, 6.34041 \times 10^{-15}, 1.63753 \times 10^{-64}\}$

Note: If $x < 182$, just use 0

9 **if(a)**

Negligible (Values too dispersed, negative trend)

$p = \{9.82682 \times 10^{-7}, 0.734307\}$

10 **a contains b**

$x := (\text{number of items in a}) - 1$

$-0.0438918 + 6.17165 \times 10^{-7}x^2$

$r^2 = 0.906365$

$p = \{0.000256419, 3.35648759752 \times 10^{-764}\}$

11 **deref(a)**

Negligible (Negative Trend)

12 **a / b**

Negligible (Values too low)

13 **a.b**

Negligible (Negative Trend, Negative Values)

14 **a = b (Numerical)**

Negligible (Values too low)

15 **a = b (Strings)**

Negligible (Values too low)

16 **a.exists(b)**

Negligible (Negative Trend, Negative Values)

17 **forall(a)**

$x := (\text{number of items in } a) - 1$
 $0.368536 + 0.000115264x$
 $r^2 = 0.53822$
 $p = \{1.44604^{-69}, 1.63331 \times 10^{-11}\}$

18 **forsome(a)**

$x := (\text{number of items in } a) - 1$
 $-0.0183684 + 6.63148 \times 10^{-7}x^2$
 $r^2 = 0.912927$
 $p = \{0.144731, 9.51459449459 \times 10^{-781}\}$

19 **a > b**

Negligible (Values too low)

20 **a >= b**

Negligible (Values too low)

21 **a groupas b**

$x := (\text{number of items in } a) - 1$
 $-0.00591995 + 2.01902 \times 10^{-7}x^2$

$$r^2 = 0.316911$$

$$p = \{0.619181, 1.50974 \times 10^{-67}\}$$

22 a in b

Same as contains

23 a[b]

Negligible (Negative Trend, Negative Values)

24 a intersect b

Negligible (Values too dispersed)

$$p = \{4.712 \times 10^{-19}, 0.824746\}$$

25 a join b

$$x := (\text{number of items in a}) + (\text{number of items in b}) - 5$$

$$0.993985 + 0.0000860779x^2$$

$$r^2 = 0.999971$$

$$p = \{2.80608 \times 10^{-203}, 5.62282379069 \times 10^{-4277}\}$$

26 a < b

Negligible (Values too low)

27 a <= b

Negligible (Values too low)

28 **max(a)**

$x := (\text{number of items in } a) - 1$
 $-0.00206558 + 0.0000179761x$
 $r^2 = 0.00486482$
 $p = \{0.866849, 0.0847042\}$

29 **min(a)**

$x := (\text{number of items in } a) - 1$
 $0.247735 - 0.00106815x + 9.2684 \times 10^{-7}x^2$
 $r^2 = 0.794276$
 $p = \{1.50916 \times 10^{-23}, 1.00011 \times 10^{-76}, 1.9999 \times 10^{-215}\}$
Note: if $x < 831$, just use 0.

30 **a % b**

Negligible (Values too low)

31 **a * b**

Negligible (Values too low)

32 **-a**

Negligible (Values too low)

33 **a <> b (Numerical)**

Negligible (Values too low)

34 **a <> b (Strings)**

Negligible (Values too low)

35 now()

Negligible (Values too low, Not enough data)

36 a or b

Negligible (Values too low)

37 a orderby b

$x := (\text{number of items in a}) - 1$

$-10.0698 + 0.893485x$

$r^2 = 0.999835$

$p = \{8.11056 \times 10^{-137}, 1.237429703722 \times 10^{-819}\}$

38 a rangeas b

Negligible (Negative Trend, Negative Values)

39 ref(a)

Negligible (Negative Trend, Negative Values)

40 a ~~ b

$x := \text{length of b}$

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

$r^2 = 0.979792$

$p = \{6.34389 \times 10^{-108}, 1.337437370542 \times 10^{-864}\}$

41 struct(a)

$x := (\text{number of items in } a) - 1$

$$4.00191 + 0.0000150654x^2$$

$$r^2 = 0.83345$$

$$p = \{2.70636 \times 10^{-12}, 7.42776 \times 10^{-39}, 0.00314473\}$$

42 a - b

Negligible (Values too low)

43 a subtract b

Negligible (Negative Trend, Negative Values)

44 sum(a)

$x := (\text{number of items in } a) - 1$

$$-0.161127 + 0.00383586x$$

$$r^2 = 0.989362$$

$$p = \{8.92934 \times 10^{-20}, 6.07425459460 \times 10^{-1115}\}$$

45 a union b

$x := (\text{number of items in } a) + (\text{number of items in } b) - 4$

$$0.195218 - 0.000825259x + 8.05861 \times 10^{-7}x^2$$

$$r^2 = 0.791186$$

$$p = \{4.84407 \times 10^{-15}, 4.6056 \times 10^{-47}, 6.58346 \times 10^{-169}\}$$

Note: If $x \nmid 654$, just use 0

46 a union b union c ... union n

$x := n - 1$

$$-0.277017 + 0.0000292739x^2$$

$$r^2 = 0.999564$$

$$p = \{2.50948 \times 10^{-81}, 1.100169975461 \times 10^{-1546}\}$$

47 **unique(a)**

Negligible (Negative Trend, Negative Values)

48 **uniqueref(a)**

Negligible (Negative Trend, Negative Values)

49 **a where b**

$$x := \text{number of items in a}$$

$$z := \text{number of conditions in b}$$

$$9.25131 + 9.13024x + 0.0650857z$$

$$r^2 = 0.999906$$

$$p = \{4.01828 \times 10^{-9}, 1.87116 \times 10^{-199}, 0.823875\}$$

50 **(boolean) a**

Negligible (Values too low)

51 **(int) a**

Negligible (Values too low)

52 **(real) a**

Negligible (Values too low)

53 **(string) a**

Negligible (Values too low)

54 (date) a

Negligible (Values too low)