

Nub Sieve ~ : _ 0 0 Not Equal

<p>~:y is the boolean list b such that b#y is the nub of y. For example:</p> <pre> ~: 'Mississippi' 1 1 1 0 0 0 0 0 1 0 0 </pre>	<p>x~:y is 1 if x is tolerantly unequal to y. See Equal (=).</p> <p>The fit conjunction may be used to specify tolerance, as in ~:!.t.</p>
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The result of nub-sieve can be used to select the nub as follows:

```

y=: 8 1 8 2 8 1 7 2
~. y
8 1 2 7

~: y
1 1 0 1 0 0 1 0

(~: y) # y
8 1 2 7

y #~ ~: y
8 1 2 7

```

The dyad ~: applies to any argument, but for booleans it is called exclusive-or. For example:

```

d=: 0 1
d ~:/ d
0 1
1 0

```

Not-equal, not equal, and the dual of equal with respect to not, all agree as illustrated below.

```

(~:/ ; -. @= / ; =&. - . /) ~ d
+---+---+---+
| 0 1 | 0 1 | 0 1 |
| 1 0 | 1 0 | 1 0 |
+---+---+---+

```