Re: Mann−Whitman: critical values by Monte Carlo

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Further values of the MANN−WHITNEY no−Parametric test, this time for two (independent) samples each of size 15.

_r(X)__cumulative__r(Y)_____Tables*
_304___0.9991___ 161____161___0.999
_293___0.9951___ 172____172___0.995
_288___0.9908___ 177____177___0.99
_280___0.9775___ 185____185___0.975
_272___0.9512___ 193____193___0.95
_264___0.9067___ 201____201___0.90

Complete accordance. (Bob and Yurra´s furores don t stop to increase, I dare: WHY?) to my funny and thoe os the Readers.
Connover´s *Practical Nonparametric Statistics*

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The program listing follows:

```
REM "MANN"
CLS
INPUT " size shorter "; na
INPUT " size larger "; nb: n = na + nb
nna = (1 + n) * n / 2
DIM x(nb), y(nb), join(na + nb), has(nna)
vv = 400000
FOR rpt = 1 TO vv
LOCATE 6, 50
PRINT USING "###########"; vv − rpt
RANDOMIZE TIMER
FOR i = 1 TO na
x(i) = RND: join(i) = x(i)
NEXT i
FOR ii = 1 TO nb
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y(ii) = RND: join(na + ii) = y(ii)
NEXT ii
FOR jo = 1 TO na
w = join(jo): order = 1
FOR j1 = 1 TO na + nb
IF join(j1) < w THEN order = order + 1
NEXT j1
xorder = xorder + order
NEXT jo
has(xorder) = has(xorder) + 1
xorder = 0
aa = INT(rpt / 10000): a = rpt / 10000
IF aa <> a THEN GOTO 100
u(1) = .999 * rpt: u(2) = .995 * rpt
u(3) = .99 * rpt: u(4) = .975 * rpt
u(5) = .95 * rpt: u(6) = .9 * rpt
FOR e = 1 TO 6: sum = 0
FOR ij = 0 TO nna
sum = sum + has(ij)
IF sum > u(e) THEN GOTO 111
NEXT ij
LOCATE 7, 12
111 wy(e) = sum / rpt: iab = na * (n + 1) − ij
PRINT USING "### #.#### ###"
; ij; wy(e); iab
NEXT e
100 NEXT rpt : END
.
```