

## Description

The range operators create vectors that count from  $a$  to  $b$ .

$a . . b$  returns a row vector.

$a : : b$  returns a column vector.

## Syntax

$a . . b$	row range
$a : : b$	column range

## Remarks and examples

$a . . b$  and  $a : : b$  count from  $a$  up to but not exceeding  $b$ , incrementing by 1 if  $b \geq a$  and by  $-1$  if  $b < a$ .

$1 . . 4$  creates row vector  $(1, 2, 3, 4)$ .

$1 : : 4$  creates column vector  $(1 \setminus 2 \setminus 3 \setminus 4)$ .

$-1 . . -4$  creates row vector  $(-1, -2, -3, -4)$ .

$-1 : : -4$  creates column vector  $(-1 \setminus -2 \setminus -3 \setminus -4)$ .

$1.5 . . 4.5$  creates row vector  $(1.5, 2.5, 3.5, 4.5)$ .

$1.5 : : 4.5$  creates column vector  $(1.5 \setminus 2.5 \setminus 3.5 \setminus 4.5)$ .

$1.5 . . 4.4$  creates row vector  $(1.5, 2.5, 3.5)$ .

$1.5 : : 4.4$  creates column vector  $(1.5 \setminus 2.5 \setminus 3.5)$ .

$-1.5 . . -4.4$  creates row vector  $(-1.5, -2.5, -3.5)$ .

$-1.5 : : -4.4$  creates column vector  $(-1.5 \setminus -2.5 \setminus -3.5)$ .

$1 . . 1$  and  $1 : : 1$  both return  $(1)$ .

## Conformability

$a . b$

$a$ :	$1 \times 1$
$b$ :	$1 \times 1$
<i>result</i> :	$1 \times \text{trunc}(\text{abs}(b - a)) + 1$

$a : b$

$a$ :	$1 \times 1$
$b$ :	$1 \times 1$
<i>result</i> :	$\text{trunc}(\text{abs}(b - a)) + 1 \times 1$

## Diagnostics

$a . b$  and  $a : b$  return missing if  $a >= .$  or  $b >= .$

## Also see

[M-2] [exp](#) — Expressions

[M-2] [Intro](#) — Language definition

Stata, Stata Press, Mata, NetCourse, and NetCourseNow are registered trademarks of StataCorp LLC. Stata and Stata Press are registered trademarks with the World Intellectual Property Organization of the United Nations. StataNow is a trademark of StataCorp LLC. Other brand and product names are registered trademarks or trademarks of their respective companies. Copyright © 1985–2025 StataCorp LLC, College Station, TX, USA. All rights reserved.



For suggested citations, see the FAQ on [citing Stata documentation](#).