

## Description

`rows(P)` returns the number of rows of *P*.

`cols(P)` returns the number of columns of *P*.

`length(P)` returns `rows(P)*cols(P)`.

## Syntax

*real scalar* `rows(transmorphic matrix P)`

*real scalar* `cols(transmorphic matrix P)`

*real scalar* `length(transmorphic matrix P)`

## Remarks and examples

`length(P)` is typically used with vectors, as in

```
for (i=1; i<=length(x); i++) {  
    ... x[i] ...  
}
```

## Conformability

`rows(P)`, `cols(P)`, `length(P)`:

*P*:  $r \times c$

*result*:  $1 \times 1$

## Diagnostics

`rows(P)`, `cols(P)`, and `length(P)` return a result that is greater than or equal to zero.

## Also see

[\[M-4\] Utility](#) — Matrix utility functions

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](#).