

for — for (exp1; exp2; exp3) stmt

[Description](#)

[Syntax](#)

[Remarks and examples](#)

[Also see](#)

Description

for is equivalent to

```
    exp1
  while (exp2) {
    stmt(s)
    exp3
  }
```

stmt(s) is executed zero or more times. The loop continues as long as exp₂ is not equal to zero.

Syntax

```
for (exp1; exp2; exp3) stmt
```

```
for (exp1; exp2; exp3) {
  stmts
}
```

where exp₁ and exp₃ are optional, and exp₂ must evaluate to a real scalar.

Remarks and examples

To understand for, enter the following program

```
function example(n)
{
  for (i=1; i<=n; i++) {
    printf("i=%g\n", i)
  }
  printf("done\n")
}
```

and run example(3), example(2), example(1), example(0), and example(-1).

Common uses of for include

```
for (i=1; i<=rows(A); i++) {
  for (j=1; j<=cols(A); j++) {
    ...
  }
}
```

Also see

[M-2] **break** — Break out of for, while, or do loop

[M-2] **continue** — Continue with next iteration of for, while, or do loop

[M-2] **do** — do ... while (exp)

[M-2] **Semicolons** — Use of semicolons

[M-2] **while** — while (exp) stmt

[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](#).