

```
## Calculator
```

```
## +, -, /, *, ^, log, exp
```

```
(17*0.35)^(1/3)
```

```
log(10)
```

```
exp(1)
```

```
3^-1
```

```
## Variables are assigned using '<-':
```

```
x<-12.6
```

```
x
```

```
# [1] 12.6
```

```
## Variables that contains many values (vectors), e.g. with the concatenate function:
```

```
y<-c(3,7,9,11)
```

```
y
```

```
# [1] 3 7 9 11
```

```
## Typethe numbers in at the keyboard using the scan()function
```

```
z<- scan()
```

```
# 1: 8
```

```
# 2: 4
```

```
# 3:
```

```
z
```

```
# [1] 8 4
```

Operator ':' means "a series of integers between":

```
x<- 1:6
```

```
x
```

```
# [1] 1 2 3 4 5 6
```

The rep function replicates the first argument by the number of times specified in the second argument:

```
rep("A",10)
```

```
# [1] "A" "A" "A" "A" "A" "A" "A" "A" "A" "A"
```

Repeated series:

```
rep(1:6,2)
```

```
# [1] 1 2 3 4 5 6 1 2 3 4 5 6
```

Elements of a series to be repeated:

```
rep(1:6,rep(3,6))
```

```
# [1] 1 1 1 2 2 2 3 3 3 4 4 4 5 5 5 6 6 6
```

```
rep(1:6,3)
```

```
# [1] 1 2 3 4 5 6 1 2 3 4 5 6 1 2 3 4 5 6
```

```
rep(1:6,rep(3,7))
```

```
# Error in rep(1:6, rep(3, 7)) : invalid 'times' argument
```

```
rep(1:6,rep(3,5))
```

```
# Error in rep(1:6, rep(3, 7)) : invalid 'times' argument
```

```
## gl function for generating levels of factors (“up to” and “with repeats of”):
```

```
gl(5,3)
```

```
# [1] 1 1 1 2 2 2 3 3 3 4 4 4 5 5 5
```

```
# Levels: 1 2 3 4 5
```

```
## To repeat the whole pattern, specify the total length
```

```
gl(5,3,30)
```

```
# [1] 1 1 1 2 2 2 3 3 3 4 4 4 5 5 5 1 1 1 2 2 2 3 3 3 4 4 4 5 5 5
```

```
# Levels: 1 2 3 4 5
```

```
gl(5,3,25)
```

```
# [1] 1 1 1 2 2 2 3 3 3 4 4 4 5 5 5 1 1 1 2 2 2 3 3 3 4
```

```
# Levels: 1 2 3 4 5
```