

Math Conventions

focus on what might seem different

Operator precedence:

- `:: $ []` PEU: `%x%` (MD)(AS) and L-to-R associativity
"1:5 * 2" : has precedence
- `!` (`& &&`) (`||` `|||`) xor
- `&` vectorized;
`&&` single-valued, efficient

Operators to note:

exponentiation: `^` (accepts `**`)
modulus: `%%` (mention `%x%`)
integer division: `/%/%`
define vector: `c(...)`
test if element present: `%in%`
equality test: `'=='`, not `'=`

```
1:5 * 2 # 1:10 or 2,4,6...?  
## [1] 2 4 6 8 10
```

```
T | F & F # & has priority  
## [1] TRUE
```

```
27 %% 6  
## [1] 3
```

```
b <- 5.3 %/% 2.6; b  
## [1] 2  
is.integer(b); as.integer(b)  
## [1] FALSE  
## [1] 2
```

```
a <- c("alpha", "beta", "gamma")  
c("gamma", "eta") %in% a  
## [1] TRUE FALSE
```