

# Regular Expressions Cheat Sheet

## Capture Groups

( [ab] ) : capture a or b  
\3 : substitute third  
or captured group  
\$3 into replacement  
string

## Tokens

\d : digit characters  
\s : whitespace characters  
\w : word characters  
\D : non-digit characters  
\S : non-whitespace characters  
\W : non-word characters  
\b : word boundary character  
. : any character

## Repeats

c+ : at least one 'c'  
c? : one or zero 'c's  
c\* : zero or more 'c's  
c{x} : exactly x 'c's  
c{x,y} : at least x, no more  
than y 'c's  
(leave x or y blank  
for no upper/lower  
limit)

## grep

```
grep [opts] <pattern> <file> [<file> ...]
```

-p : use perl-style regex  
-i : case-insensitive mode  
-v : inverted matching  
-c : count matches  
-C N : include N lines of  
context

## Sets

[abc] : a, b, or c  
[a-z] : any lowercase letter  
[^abc] : NOT a, b, or c

## Match Options

[AT] | [CG] : match either A or  
T, OR C or G

## Anchors

^ : beginning of string  
\$ : end of string