

# Computer Science Cheat Sheet

## Greek Alphabet

$A$	$\alpha$	Alpha	$I$	$\iota$	Iota	$P$	$\rho$	Rho
$B$	$\beta$	Beta	$K$	$\kappa$	Kappa	$\Sigma$	$\sigma$	Sigma
$\Gamma$	$\gamma$	Gamma	$\Lambda$	$\lambda$	Lambda	$T$	$\tau$	Tau
$\Delta$	$\delta$	Delta	$M$	$\mu$	mu	$Y$	$\upsilon$	Upsilon
$E$	$\epsilon$	Epsilon	$N$	$\nu$	nu	$\Phi$	$\phi$	Phi
$Z$	$\zeta$	Zeta	$\Xi$	$\xi$	Xi	$X$	$\chi$	Chi
$H$	$\eta$	Eta	$O$	$o$	Omicron	$\Psi$	$\psi$	Psi
$\Theta$	$\theta$	Theta	$\Pi$	$\pi$	Pi	$\Omega$	$\omega$	Omega

## Abstract Algebra

Field

A set  $F$  with two binary operations  $+$  and  $\cdot$  ia a *field* if:  
1.  $+$  and  $\cdot$  are commutative

## Probability

## Complexity

## Linear Algebra

## e

$$e = \lim_{n \rightarrow \infty} \left(1 + \frac{1}{n}\right)^n$$
$$\frac{1}{e} = \lim_{n \rightarrow \infty} \left(1 - \frac{1}{n}\right)^n$$
$$e = \sum_{n=0}^{\infty} \frac{1}{n!}$$
$$e = \lim_{x \rightarrow 0} (1+x)^{\frac{1}{x}}$$