Lecture 2 08/30/16	A. Kapeloner
Leave & Corr	
$F \cap \Omega = F \qquad F \in \mathcal{A}$	
$FU \mathcal{N} = \mathcal{N} \qquad F \subseteq \mathcal{N}$	
$\phi \cap \Lambda = \phi \qquad F \setminus \Lambda$	= \$ 01 aus SKS (NO) subsence =
A \ r	= Fc (set complement)   SIII = ( second)
$\phi \cup \mathcal{N} = \mathcal{N} \qquad \mathcal{I}(f^c)^c =$	
A . I A C	n V 1/2 ((1,0))
5 A . A c	3 are called collectively exhausive
1 . , , , ,	X < > =   M
£ A., A2, A3, 3	amontable infining
L 11, , P12 , P13 ,	(want of hour and
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	A, UA2 UA3
i=1	20103 10103 10103
Anac = p	
§ 1 4 = 3 - neutrally e	xdusive ("disjoint")
1 1 1 3 are A	methially exclusive if
L /4 , , M 2 ,	But and only have been been
Ai NAj = \$\psi \text{\forall}{i \psi j}	2013 say A . 8128
1+i 11HJ -9 1FJ	8-18,93
N  =  A  +  A=   for	1 Prute
	1/4×E
1A1 - 1N1 - 1Ac1	
[A] = [OU] = [A]	4 10 to 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Consider A B & D	(AVB)C 00-
Counter 12,0 - DC	(AUS)
(110)6	7 - M - M - M
(AVB) = ACABC	> D'Morgan's Law.
(AAB)° = A° UB°	
1	holes = irrofional #s.
rat. Q = { \bar{q} : p \in \bar{Z}, q \in \bar{N} \}	"real" IR = Q U { all numbers }
	[3,7]:= {x:x7,3,x=73CR
Q = No	Expressed to the second

Lecture 2	08/30/16
terraine of the hat sources discussed	deal one Sola in Salation
IR \ Q	
PARENT MARCH & B. Complant	(Leal nembers;
Consider (0,1) c 1/2	can't court them;
1(0,1)1 = 11R	
(0/4)1   111XI	0.61001
Assume (0,1)/ = No	0.00101
The second secon	0.01161
R = 4>X	0,00
uniontable infinity.	A CALL A
Ordered Pain	
(a, b > := { 1a3, {a, b 3 }	
element a, element & in the ord	ler.
element is present	
A 1 A 14	Browder planting of the tell
Courteman Product	REPAIL MAKE A LANGUAGE AND A STATE OF THE ST
AxB:= { < a, 6 x : a ∈ A,	0 . 10 3
A x 10 = 1 car . a E A	, v = B /
Let's say A = 21	1,23 A×B = { 22,37, 21,47, <1,37, <2,
13 = {3	2,43
her Condinately - warming desire	
(A ×B) = 4	14×131 = [A][B] if finite.
A1 = 3	#2
A 2 := A × A	D 2
A3 = AxAxA	ELLI BOLLES BOLLES
$ A^n  :=  A ^n$	R
n e IN	CAUSSIE LAC DOC
TO CITY	The Police - STUP A - Tropial
1 1	
1 = { w1, w2, }	
	Experiment w & R is chosen.
Sample "outone"	hen win flips -> refouteomes. $N = \{H, T\} \   M  = 2$
Space outcome a	hen win traps
ontion	(1.1.)
Space	
Prince Service Control of the	locture 2

Lecture 2 03/30/16 > "event" : set of outcomes AER A 6 2 1 = { \$, \$H3, \$73, \$H,73} event space je orll events. Probability: P(A) = |A| if A finite. P(H) - 141 P(SH3) = 1 2 2 correct graninear events p. 22 \_\_\_\_\_ [0,1] range of P Eisa Function P(p) = D P( EH3 N ET3) Probably of getting book heads tode. p(n)=1 P(8HIT3)=1 P(8H3 U (T3) =1  $P(A^{c}) = \frac{|A^{c}|}{|\mathcal{N}|} = \frac{|\mathcal{N}| - |A|}{|\mathcal{N}|} = 1 - \frac{|A|}{|\mathcal{N}|}$ Complement Rele. > P(A) = 1- P(A) Two coin fleps N' = N2 = } < 4, H7, & H, T7, & T, H7, < +, T2