	ECE 139 H.W. 2 Snehith Nayak 3961497
16	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	Problem 1
Ο.	1 2 3 4 5 6
	1 2 3 4 5 6 7 { P(Ax) for K=
	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
	3 4 5 6 7 8 9 3 36 0 36
	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
	5 6 7 8 9 10 11 (5 36 10 36
	6 7 8 9 10 11 12 6 - 36 11 = 36
	Total: 36
Z-1:	of a December 1
	P(Bk) for K=
	$2 = 1$ $8 = \frac{15}{36}$
	$3 = \frac{35}{36}$ $9 = \frac{16}{36}$
	$4 = \frac{33}{36}$ $5 = \frac{30}{36}$ $11 = \frac{3}{36}$
	$5 = \frac{30}{36}$ $11 = \frac{3}{36}$
	$3 = \frac{35}{36} \qquad 0 = \frac{10}{36}$ $4 = \frac{33}{36} \qquad 10 = \frac{6}{36}$ $5 = \frac{30}{36} \qquad 11 = \frac{3}{36}$ $6 = \frac{26}{36} \qquad 12 = \frac{1}{36}$ $7 = \frac{21}{36}$
	$7 = \frac{21}{36}$
b.	P(E B) P(B)= 21/36 P(E 1 B) = 9/36
	$= P[E \cap B_{7}] = \frac{3}{2} = 42.9 \%$
	P[B7] 21/36
С.	P[A10 U A1, B7] = 3/21

250 1-7 - 9/	
P(B, 1E) = 9/18 = 1/2	Experience of the second of th
P(By 1 B6) = 1/26 = 5/3	
	$SO_{1} = \{0, 1, 2\}$
P[O 1 B8 B7] = 1/21	
$\frac{6 \times 5}{6 \times 6} = \frac{5}{6} = 83.3 \%$	O=[RUDIANDIS
6×6	
Problem 2	CRIVITION - CIAKIS A
The state of the s	CYARIO - A TAIL
S= {a,b,c,d} P[{a,b}]	=2/3
P[{a,c}])	c, dz) = 1/4
	0,627=1/2
	(Asign Parks)
P[(a, b]) = P(a) + P(b)	With the same Land
P[{a,c}1{c,d}] = P[{a,c}n{c,d}) = P(c) = { P(c,d)}
P[[c,d]]	
? ({a,d}1{ab}) = P({a,d}) n {a,1	037 = P[a] 1
P[{a,b}]	2/3
	p(4) = 1 x 24 = 1/3
P[{a,b}] = P(a] + P(b) = }	+ P(b) = 3 -> p(b) = = - 1 = +
p(1)= } + = 12	Q(A)=13
La remaining	0(8)=1/3
p(0) = \frac{1}{3} \frac{1}{4} = \frac{1}{12} = \frac{1}{4}	p(c) = 1/2
P(1) 2 3 4 12 4	p[0]= 1/4
	Company of the Compan

	Problem 3
	TWILE TO THE TOTAL PROPERTY OF THE PARTY OF
	P(C)= 0.2
	P(A)=0.1
	Market Market Colly
	75
	P(CNA)CUA)=0.5
Ŋ	P[An() = 0.5 [p(A) + p(c)) = 0.15
	(AAC) = 0.5 (V(A) + V(C)) = 0.15
b	P[AICT = P(AAC) - 0.15 3 - 0.75
	P[AIC] = P(AAC) = 0.15 3 - 0.75 P(C) 0.2 4
	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -
C	P(CIA) = D(AUC)P(c) - 0.15 x 0,2 0.3
	P(A) 0.1
	Color Color For all
	162 S. 1 - FUP SET - (1607A 20.07 19 PREDITIONAL) E
	(56 32/9) 1 2 0 19 France A. St. 64 to -2 (50 82/5/ 22) o
The American Company	
j	- FOR COUNTY OF COUNTY OF COUNTY OF FRANCISCO
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	20 Million Control
- / 35.0	Wally The Free Mary
	pt = [6]q
4	

_	Problem 4.
_	P(A) + P(B) -2P[ANB]
_	
-	P(ANB)V(ANB)
1	= P[(AnB)) + P(AnB)
-	= P[B=(AAB)
	= P[B-(A \caps)] + P(A - (A \caps))
	= P(B)-P(ANB)+P[A-(ANB)]
	= P(B)-P(A)B)+P(A)-P(A)B) = P(A)+P(B) - 2P(A)B)
	(M) FP(B) - 2P(ANB)
	O - lot - C
	Problem 5
	P(ANBAC) = P[AIBAC] P[BIC] P[C)
	P(ANBAC), P(BKC), P(G)
	= P[ANBNC]
	- r[Ansnc)
	Problem 6
	$P(A) = 10^{-3}$ $P(B) = 3 \times 10^{-3}$ $P(B H) = 6 \times 10^{-3}$
	a. P(AAB) =
	P(BIH) = P(BNA) = 6×10-3 × 10-3
	P(A)
	$= 6 \times 10^{-6}$
	b. p (AIB) = P(BIH) x P(A) = 6×10-6 = 2×10-3
	P(B) 3×10-3