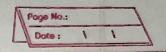
Teacher's Signature:.....

	Revitation 2
ALDE	those racharles of word ode su work
4)	A coin is to seed twice, Alice claims that eventhe of two how
	is not clast on literalial in a know most the liter toss is a hour
	han if use know hat at least and the tosses in head Is she Right? Does it make a Difference if the com is fair
	Is she Right? Does it make a Difference if The com is gain
TIPH	68 volais? now (on we generaline Aru) Reasoning?
\rightarrow	We have true events
	Us have two events A > 12/15t toss is word
	B-> second toss in had
	1 1 2 20116
	p(AnglA) and p(AnglAvg)
	Dia Bia
	First tossin had ARSI toss 15 head
(1)	P(AnB)A)2 P(AnB)nA) (i)p (AnB (Aug)2 p(AnB) (Aug)
	P(A)
	= p(AnB) = P(AnB)
	P(A) P(AUB)
	Also from Question we know plaus) > pca)
	:. (i) 6 @ > (ii)
	: Alreers Regent Regendless of Yala Ivalain coin.
	in case of pain coin
	10 case of Bain coin 2 = Eann, NT, TH, TT
	p(AnglA)= 2/4 m 1 p(AnglAUB): 1/4 1 Buy 1 p(AnglAUB): 1/4 3 3/7 3
	Buy 3 314 3
	Generalization, A, Banda Betherent, BCC
	AND = ANC (HCBCC)
	Then as went Ars as last as likely 1) we know that Bhs
	occurred man if we know that ches occurred
	Africe emplains this C=AUB.

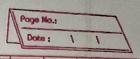


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2)	We soll two jour 6-sided Dice. Euch one of the 36
to pt.	possible outcomes is accomed to be equally tikely.
9)	possible outcomes is ascomed to be equally Tikely. Find the prob Doubles are Rolled
(B)	Given mat the Roll Result in ason of youles find the
onla	Conditional prob most doubles cure Relled
(0)	Find me probability that atleast andie Rollis 96
a)	Gren mat the two dreeland on Diggerent numbers,
	Find m conditional prob That atteast on die Roll's
no	a 6 ap tot big a Dot I do mar marriage to
	Exact a language
->	D Freeh Dreshlamstram = 1/36
	Doubles possibility = (= proh = 1/36 = 1/
P	D (Sum Ly) = {(111), (112); (1,8), (2,1), (2,12), (3,1)
	_1. Prob(Doubles Sum 24) = 2/2 1/3
	the sample of white the sample well
9	There are 11 possible outomes and all all and all all and all all all all all all all all all al
	1 = 5(6,6), (6,5) (6,4) (6,3), (6,2), (6,1),
	(16), (2,6), (3,6), (4,6), (5,6).9
	psob = 11/36 () somonal does latel
1	
0)	Outroms of two com no: {(1/1)}/12/2)(3/3)/44, 4)(1)
) (In	1 (Alm) (Alm) (Alm)
0010	p(outcome norts ame) = 36, -6 = 36 p(outcome norts ame) = 36,
35.0	p(outcome norts ame) = 30
	atuator die ROUIC 62 2 (6/1), (6,2), (6,4)
	(6,5), (1,6), (2,6), (3,6), (4,6),
	(5,6) 3 w) (work (
	18/(4)8 = (147/10)8 = (17/10)8
	p(onedre Rd) 156 outcome of two not Sum) = 10 = 1
	20 3

You enter a chess tournament where your probability winning a game is 0.3 against half of me players low then type 2), 0.4 against a quastos of the player (courty Lyne 2) and 0.5 against The Remaining quarter of player (cauthern type 3) You play against a Randomby chosen apponent. who istre prob q whoing? Suppose you win what Is my plob that you had an opponent of type I 5.0 ((U) P(A27-0-25, (211) P(A3):10:15 = (P & raus | Edde oc) do = 9 plet who winning event Pl/1997 = 10.3 Plw141) = 6.3 p(w/Az) 2 0-4 plu/pr) x pla 123/= 8.9 plulas)=0.5 Total probthonom cap plw)= p(A1) xp(w(A1) = 0.5x0.3 +P(B2) x p(w/A) +0-25 x0.4 0125 +p(A3)xp(w) A3) +0.25 x 0.5 0.100 0.150 = 0.15 + 1000 0.1 + 10:125 0.375 p(w) 2 0.375 die Reclie (63)(69) Cause-Ether Question 2 know p(W/A) = 03 P(W) = P(W) = P(A) xp(P(A) or a (mino ton

Teacher's Signature:.....



P(A11W) = P(A10W) = P(A1)xp(WIAI) = P(AI) x p(w|AI) (Fromi) = 0.5×0.3 0.375 = 0.4 -> Inferna. P(Alw) 4) The Monty Mad problem. This is a much Discussed puzzle, basedon old American game show, You am told much aprize is equally likely to be found behind ony of thru closed doors in front of you. You point to one of doors. A friend open for you one of the Romanny two doors, Abton making sure most me prizers Bot bellmdi). At this point, you can stick to your initial choice, ox switch to momen unopened door . You winn the parce if it lies behind your final charce of door. Consider to Ballowing shategles. Still to the sound door prob of umning 1/2 1/5. a) You pick a door prohywhong = 1/2
and oray withit b) Switch to other unopend door onopend down must have can. (Switchy = 2/3) erhile 1/2 stay (1/3) : Switchig to chopened doon shows the character winning