Date: // Page No. 4. 3R. 2W, 1B a. $Pr(EmaMa \ Winning) = Pr(W) + Pr(RB) + Pr(RRW) + Pr(RRRB)$ $= \frac{2}{6} + (\frac{3}{6} \times \frac{1}{5}) + (\frac{3}{4} \times 2 \times \frac{2}{4})$ $+ (\frac{3}{6} \times \frac{2}{5} \times \frac{1}{4} \times \frac{1}{3})$ $= \frac{2}{6} + \frac{3}{30} + \frac{3}{30} + \frac{1}{60}$ $= \frac{2}{60} + \frac{3}{30} + \frac{3}{30} + \frac{1}{60}$ $= \frac{2}{60} + \frac{3}{60} + \frac{3}{60} + \frac{3}{60}$ $= \frac{3}{60} + \frac{3}{60} + \frac{3}{60} + \frac{3}{60} + \frac{3}{60}$ $= \frac{3}{60} + \frac{3}{60} + \frac{3}{60} + \frac{3}{60} + \frac{3}{60} + \frac{3}{60}$ $= \frac{3}{60} + \frac{3}{60} + \frac{3}{60} + \frac{3}{60} + \frac{3}{60} + \frac{3}{6$		
Page No. 4. $3R$. $2W$, $1B$ a. $Pr(Emerica Winning) = Pr(W) + Pr(RB) + Pr(RRW) + Pr(RRRB)$ $= \frac{2}{6} + (\frac{3}{6} \times \frac{1}{5}) + (\frac{3}{6} \times 2 \times \frac{2}{4})$ $+ (\frac{3}{6} \times 2 \times \frac{1}{4} \times \frac{1}{3})$ $= \frac{2}{6} + \frac{3}{6} + \frac{3}{6} + \frac{1}{6}$ $= \frac{2}{6} + \frac{3}{6} + \frac{1}{6} + \frac{1}{6} + \frac{1}{6}$ $= \frac{2}{6} + \frac{3}{6} + \frac{1}{6} + \frac{1}{6} + \frac{1}{6} + \frac{1}{6}$ $= \frac{2}{6} + \frac{1}{6} + \frac{1}{6} + \frac{1}{6} + \frac{1}{6} + \frac{1}{6} + \frac{1}{6}$ $= \frac{2}{6} + \frac{3}{6} + \frac{1}{6} $		Date: / /
a. $Pr(Emana Winning) = Pr(W) + Pr(RB) + Pr(RRW)$ $+ Pr(RRRB)$ $= \frac{2}{6} + (\frac{3}{5} \times \frac{1}{4}) + (\frac{3}{5} \times \frac{2}{5} \times \frac{2}{4})$ $+ (\frac{3}{5} \times \frac{2}{5} \times \frac{1}{4} \times \frac{1}{3})$ $= \frac{2}{6} + \frac{3}{5} + \frac{3}{5} + \frac{1}{6}$ $= \frac{2}{6} + \frac{3}{5} + \frac{3}{5} + \frac{3}{5} + \frac{1}{6}$ $= \frac{2}{6} + \frac{3}{5} + \frac{3}{5} + \frac{3}{5} + \frac{1}{6}$ $= \frac{2}{6} + \frac{3}{5} + \frac{3}{5} + \frac{1}{6}$ $= \frac{2}{6} + \frac{3}{5} + \frac{3}{5} + \frac{1}{6}$ $= \frac{2}{6} + \frac{3}{5} + \frac{3}{5} + \frac{3}{5} + 3$		
a. $Pr(Emana Winning) = Pr(W) + Pr(RB) + Pr(RRW)$ $+ Pr(RRRB)$ $= \frac{2}{6} + (\frac{3}{5} \times \frac{1}{4}) + (\frac{3}{5} \times \frac{2}{5} \times \frac{2}{4})$ $+ (\frac{3}{5} \times \frac{2}{5} \times \frac{1}{4} \times \frac{1}{3})$ $= \frac{2}{6} + \frac{3}{5} + \frac{3}{5} + \frac{1}{6}$ $= \frac{2}{6} + \frac{3}{5} + \frac{3}{5} + \frac{3}{5} + \frac{1}{6}$ $= \frac{2}{6} + \frac{3}{5} + \frac{3}{5} + \frac{3}{5} + \frac{1}{6}$ $= \frac{2}{6} + \frac{3}{5} + \frac{3}{5} + \frac{1}{6}$ $= \frac{2}{6} + \frac{3}{5} + \frac{3}{5} + \frac{1}{6}$ $= \frac{2}{6} + \frac{3}{5} + \frac{3}{5} + \frac{3}{5} + 3$	4.	3R. QW, IB
$= \frac{2}{6} + \left(\frac{3}{6} \times \frac{1}{5}\right) + \left(\frac{3}{6} \times \frac{2}{5} \times \frac{2}{4}\right)$ $+ \left(\frac{3}{6} \times \frac{2}{5} \times \frac{1}{4} \times \frac{1}{3}\right)$ $= \frac{2}{6} + \frac{3}{30} + \frac{3}{30} + \frac{1}{60}$ $= \frac{20 + 6 + 6 + 1}{60} = \frac{33}{60} = \frac{11}{60}$ $= \frac{20 + 6 + 1}{60} = \frac{11}{60}$ $= \frac{20 + 6 + 1}{60} = \frac{11}{60}$ $= \frac{20 + 6 + 1}{60} = \frac{11}{60}$ $= \frac{20 + 1}$		
$= \frac{2}{6} + \left(\frac{3}{6} \times \frac{1}{5}\right) + \left(\frac{3}{6} \times \frac{2}{5} \times \frac{2}{4}\right)$ $+ \left(\frac{3}{6} \times \frac{2}{5} \times \frac{1}{4} \times \frac{1}{3}\right)$ $= \frac{2}{6} + \frac{3}{30} + \frac{3}{30} + \frac{1}{60}$ $= \frac{20 + 6 + 6 + 1}{60} = \frac{33}{60} = \frac{11}{60}$ $= \frac{20 + 6 + 1}{60} = \frac{11}{60}$ $= \frac{20 + 6 + 1}{60} = \frac{11}{60}$ $= \frac{20 + 6 + 1}{60} = \frac{11}{60}$ $= \frac{20 + 1}$		a. Pr(Emana Winning) = Pr(W) + Pr(RB) + Pr(RRW)
$= \frac{2}{6} + \left(\frac{3}{6} \times \frac{1}{5}\right) + \left(\frac{3}{6} \times \frac{2}{5} \times \frac{2}{4}\right)$ $+ \left(\frac{3}{6} \times \frac{2}{5} \times \frac{1}{4} \times \frac{1}{3}\right)$ $= \frac{2}{6} + \frac{3}{5} + \frac{3}{4} + \frac{1}{3}$ $= \frac{2}{6} + \frac{3}{5} + \frac{3}{4} + \frac{1}{3}$ $= \frac{2}{6} + \frac{3}{5} \times \frac{1}{4} \times \frac{1}{3}$ $= \frac{2}{6} \times \frac{1}{6} \times \frac{1}{6} \times \frac{1}{3} \times \frac{1}{4} \times \frac{1}{3}$ $= \frac{2}{6} + \frac{3}{6} \times \frac{1}{3} \times \frac{1}{4} \times \frac{1}{3}$ $= \frac{2}{6} \times \frac{1}{6} \times \frac{1}{3} \times \frac{1}{4} \times \frac{1}{3}$ $= \frac{2}{6} \times \frac{1}{6} \times \frac{1}{3} \times \frac{1}{4} \times \frac{1}{3}$ $= \frac{2}{6} \times \frac{1}{6} \times \frac{1}{3} \times \frac{1}{4} \times \frac{1}{3}$ $= \frac{2}{6} \times \frac{1}{6} \times \frac{1}{3} \times \frac{1}{4} \times \frac{1}$		+ TC (KRRB)
$+ \left(\frac{3}{8} \times \frac{2}{4} \times \frac{1}{3}\right)$ $= \frac{2}{6} + \frac{3}{30} + \frac{3}{30} + \frac{1}{60}$ $= \frac{20+6+6+1}{60} = \frac{33}{60} = \frac{11}{60}$ $= \frac{20+6+6+1}{60} = \frac{11}{60}$ $= \frac{20+6+6+1}{60} = \frac{11}{60}$ $= \frac{20+6+6+1}{60} = \frac{11}{60}$ $= \frac{20+6+6+1}{60} = \frac{11}{60}$ $= \frac{20+6+1}{60} = \frac{11}{60}$ $= \frac{20+6+1}{60} = \frac{11}{60}$ $= \frac{20+6+1}{60}$	A. C.	$= 2 + (3 \times 1) + (3 \times 2 \times 2)$
$= \frac{2}{6} + \frac{3}{30} + \frac{3}{30} + \frac{1}{60}$ $= \frac{20+6+6+1}{60} = \frac{33}{60} = \frac{11}{60}$ $= \frac{60}{60} + \frac{60}{60} = \frac{20}{60}$ $= \frac{20+3}{60} + \frac{3}{30} + \frac{1}{60}$ $= \frac{30+6+6+1}{60} = \frac{33}{60} = \frac{11}{60}$ $= \frac{60}{60} + \frac{20}{60}$ $= \frac{60}{60} + \frac$		
= 2 + 3 + 3 + 1 $= 2 + 3 + 3 + 1$ $= 2 + 3 + 3 + 1$ $= 30 + 60$ $= 20 + 60 + 60$ $= 60 +$	1 1 1	$+\left(\frac{3}{6}\times\frac{2}{5}\times\frac{1}{4}\times\frac{1}{3}\right)$
= 20+6+6+1 = 33 = 11 60 60 60 20/ be No. this is not a fair game. Pr (Emma Winning) \(\pm\) Pr (Jack Winning) Emma has a brightly higher chance of Winning		
= 20+6+6+1 = 33 = 11 60 60 60 20/ be No. this is not a fair game. Pr (Emma Winning) \(\pm\) Pr (Jack Winning) Emma has a brightly higher chance of Winning		= 2 + 3 + 3 + 1
be No. this is not a fair game. Pr (Emma Winning) \neq Pr (Jack Winning) Emma has a brightly higher chance of Winning		6 30 30 60
be No. this is not a fair game. Pr (Emma Winning) \neq Pr (Jack Winning) Emma has a brightly higher chance of Winning		= 20+6+6+1 = 33 = 11
be No. this is not a fair game. Pr (Emma Winning) \neq Pr (Jack Winning) Emma has a brightly higher chance of Winning	279	60 20/
Pr (Emma Winning) \(\frack Pr (Jack Winning) Emma has a brightly higher chance of Winning	42	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Pr (Emma Winning) \(\frack Pr (Jack Winning) Emma has a brightly higher chance of Winning		to No. this is not a fair game.
		Emma has a brightly higher chance of winning

	Date: / / Page No.
	b. Pr (Emma Winning the first ball, picked was red)
	= Pr (Emma Wins first ball is red)
	Pr (1st ball is red)
	= 11/20 - 2/6 (from part A)
	3/6
	$= \frac{13/60}{3/6} = \frac{13 \times 6}{3 \times 6} = \frac{13}{30} = 0.433$
	C. Pr (Emma losing by drawing black ball) $= Pr(B) + Pr(RRB) + Pr($ $= \frac{1}{6} + (\frac{3}{5} \times \frac{2}{5} \times \frac{1}{4})$ $= \frac{1}{6} + (\frac{3}{6}) = \frac{13}{6} = 0.2166$ $= \frac{1}{6} + (\frac{3}{6}) = \frac{13}{6} = 0.2166$
	d. Pr (Emma Winning by Jack drawing black ball)
	= Pr(RB) + Pr(RRB)
	$= \frac{3}{30} + \frac{1}{60} = \frac{9}{60} = \frac{0.116}{60}$
A.V.	
	e. Pr (Emma losing by drawing a black bal), given that
	She (ost)
	- Pr (Emma losing by drowing a black ball)
	Pr (Emma lost)
	= 0.2166 = 0.2166 = 0.4813
	(1-0-55) 0.45
	Scanned by CamScanner

Page No. Pr (Emma losing) Someone drew black ball) Pr (Emana losing by drawing abbutball) Pr (Emma drawing black + Pr (Jack drawing ball)

black ball) = 0.2166 0.2166 + 0.1166

5.	P.Clina Isline)
	a. Pr ('HH' appearing before 'TT) = Pr(Lina Wine)
	= 1/4
	b. Pr (Lina wins : f she chooses HTT and Bepo choses TTH)
	= Pr (HTT appearing before TTH)
-	2 ***
	Cognisidering the first 2 throws the possible outcomes
	are HH, HT, TH and TT. O I are HH, HT, TH and TH will
	Out of these 4 outcomes, HH, HT and TH will
	everytually lead Lina to TTH
	Will nesult in Hit before first 2 troops
	The only way Belo wire to
	are tails.
	· Pr(Lina wins) = 3/4
6.	L: Passing lighting lest
	S: Passing Size Fest
	I : Pass the info test
	V: Photo is valid.
	P(v) = P(s) x P(&IS) x P(I[SL)
	$= 0.7 \times 0.8 \times 0.9$
	= 0.504
1	P(vc) = 0.496 - Probability that a photo is invalid
	$P_{C}(1^{c}) = 0.4 \times 0.2 = 0.2822$
-#.	$\frac{1. \Pr(L^2) = 0.4 \times 0.2}{0.496} = 0.2822$
	(Pr(L')= Pr(S) x P(\$15)) Sizing lest passed and
	- lost forles
	- Pr (V°) / ly ht 7087 1 100