

SHOBHAM GUPTA.

180749

HW-6

classmate

Date _____

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p_{ij}	0	1	2	3	4
0	1	0	0	0	0
1	0.4	0	0.6	0	0.
2	0	0.4	0	0.6	0.
3	0	0	0.4	0.6	0.6
4	0	0	0	0.6	1

$X_0 = 2$

$$P(\text{loss}) = P_{2:0}$$

$$P = (0.4)^2 + 0.6 \times 0.4 \times P + 0.4 \times 0.6 P.$$

$$\boxed{P = 0.307}$$

$$P(\text{win}) = 1 - P(\text{loss}) = \underline{\underline{0.692}}$$

(Ans)