

**3E3 Modelling Risk
Exam Paper 2003**

Short Crib

1(a)

From / To	Start	Win	Lose	P4	P5	P6	P8	P9	P10
Start	0	0.222	0.111	0.083	0.111	0.139	0.139	0.111	0.083
Win	0	1	0	0	0	0	0	0	0
Lose	0	0	1	0	0	0	0	0	0
P4	0	0.083	0.167	0.75	0	0	0	0	0
P5	0	0.111	0.167	0	0.722	0	0	0	0
P6	0	0.139	0.167	0	0	0.694	0	0	0
P8	0	0.139	0.167	0	0	0	0.694	0	0
P9	0	0.111	0.167	0	0	0	0	0.722	0
P10	0	0.083	0.167	0	0	0	0	0	0.75

1(b)(i)

N/A

1(b) (ii)

[0.039, 0.763, 0.102, 0.020, 0.074].

1(b) (iii)

[0.034, 0.638, 0.091, 0.091, 0.145]

3(d)

$a = 95.612$

$b = 1.047$

4(a) 0.068

4(b) 0.450

4(c) 0.447

4(d) 0.103

4(e) 0.702

4(f) 2.244

4(g) 74.8%