

Exercise 5

S1: <P1,P2,P5,P2,P7,P3>

S2: <P1,P4,P5,P1,P6,P7>

S3: <P1,P6,P1,P4>

S4: <P5,P4,P1,P6,P7>

S5: <P5,P3>

S6: <P1,P2,P7,P3>

S7: <P2,P7>

S8: <P1,P2,P4,P1,P2,P6,P7,P3>

Probabilities

Start <P1, P1, P1, P5, P5, P1, P2, P1>

Start → P1 = $5/8 = 0.625$

Start → P2 = $1/8 = 0.125$

Start → P5 = $2/8 = 0.250$

P1 <P2, P4, P6, P6, P4, P6, P2, P2, P2>

P1 → P2 = $4/9 = 0.44$

P1 → P4 = $2/9 = 0.22$

P1 → P6 = $3/9 = 0.33$

P2 <P5, P7, P7, P7, P4, P6>

P2 → P5 = $1/6 = 0.167$

P2 → P7 = $3/6 = 0.5$

P2 → P4 = $1/6 = 0.167$

P2 → P6 = $1/6 = 0.167$

P3 <E, E, E, E>

P3 → End = $4/4 = 1$

P4 <P5, E, P1, P1>

P4 → P5 = $1/4 = 0.25$

P4 → E = $1/4 = 0.25$

P4 → P1 = $2/4 = 0.5$

P5 <P2, P1, P4, P3>

P5 → P2 = $1/4 = 0.25$

P5 → P1 = $1/4 = 0.25$

P5 → P4 = $1/4 = 0.25$

P5 → P3 = $1/4 = 0.25$

P6 <P7, P1, P7, P1, P7>

P6 → P7 = $3/5 = 0.6$

P6 → P1 = $2/5 = 0.4$

P7 <P3, E, E, P3, E, P3>
 P7 → P3 = 3/6 = 0.5
 P7 → E = 3/6 = 0.5

