

F74065050	邱凱琳	資訊 110	F74066080	游淳如	資訊 110
F74062078	丁筠馨	資訊 110	F64054049	黃姿涵	資訊 110

## Can You Win at Gambling? – Group 23

## Dataset

Even/Odd:

Probability :  $18/38$ (win)       $20/38$ (lose)

Transition probability matrix(at most 20 dollars):

[illegible]

Transition probability matrix(at most 30 dollars):

[illegible]

[illegible]

F74066080	游淳如	資訊	110
F64054049	黃姿涵	資訊	110

Transition probability matrix(at most 20 dollars):

[illegible]

Transition probability matrix(at most 30 dollars):

[illegible]

F74065050	邱凱琳	資訊 110	F74066080	游淳如	資訊 110
F74062078	丁筠馨	資訊 110	F64054049	黃姿涵	資訊 110

Even&Red / Odd&Black:

Probability:  $8/38$ (win 2/2)  $20/38$ (win1/2)  $10/38$ (lose)

Transition probability matrix(at most 20 dollars):

#	0,	2,	4,	6,	8,	10,	12,	14,	16,	18,	20,	22,	24,	26,	28,	30
[	1,	0,	0,	0,	0,	0,	0,	0,	0,	0,	0,	0,	0,	0,	0,	0,],#0
[	10/38,20/38,	8/38,	0,	0,	0,	0,	0,	0,	0,	0,	0,	0,	0,	0,	0,	0,],#2
[	0,10/38,20/38,	8/38,	0,	0,	0,	0,	0,	0,	0,	0,	0,	0,	0,	0,	0,	0,],#4
[	0,	0,10/38,20/38,	8/38,	0,	0,	0,	0,	0,	0,	0,	0,	0,	0,	0,	0,	0,],#6
[	0,	0,	0,10/38,20/38,	8/38,	0,	0,	0,	0,	0,	0,	0,	0,	0,	0,	0,	0,],#8
[	0,	0,	0,	0,10/38,20/38,	8/38,	0,	0,	0,	0,	0,	0,	0,	0,	0,	0,	0,],#10
[	0,	0,	0,	0,	0,10/38,20/38,	8/38,	0,	0,	0,	0,	0,	0,	0,	0,	0,	0,],#12
[	0,	0,	0,	0,	0,	0,10/38,20/38,	8/38,	0,	0,	0,	0,	0,	0,	0,	0,	0,],#14
[	0,	0,	0,	0,	0,	0,	0,10/38,20/38,	8/38,	0,	0,	0,	0,	0,	0,	0,	0,],#16
[	0,	0,	0,	0,	0,	0,	0,	0,10/38,20/38,	8/38,	0,	0,	0,	0,	0,	0,	0,],#18
[	0,	0,	0,	0,	0,	0,	0,	0,	0,10/38,20/38,	8/38,	0,	0,	0,	0,	0,	0,],#20
[	0,	0,	0,	0,	0,	0,	0,	0,	0,	0,10/38,20/38,	8/38,	0,	0,	0,	0,	0,],#22
[	0,	0,	0,	0,	0,	0,	0,	0,	0,	0,	0,10/38,20/38,	8/38,	0,	0,	0,	0,],#24
[	0,	0,	0,	0,	0,	0,	0,	0,	0,	0,	0,	0,10/38,20/38,	8/38,	0,	0,	0,],#26
[	0,	0,	0,	0,	0,	0,	0,	0,	0,	0,	0,	0,	0,10/38,20/38,	8/38,	0,	0,],#28
[	0,	0,	0,	0,	0,	0,	0,	0,	0,	0,	0,	0,	0,	0,10/38,20/38,	8/38,	1,],#30

Transition probability matrix(at most 30 dollars):

[illegible]

F74066080	游淳如	資訊	110
F64054049	黃姿涵	資訊	110

Transition probability matrix(at most 20 dollars):

[illegible][illegible]



F74066080	游淳如	資訊	110
F64054049	黃姿涵	資訊	110

[illegible]

F74066080	游淳如	資訊	110
F64054049	黃姿涵	資訊	110

[illegible]

F74066080	游淳如	資訊 110
F64054049	黃姿涵	資訊 110

Column / Dozen:

Probability:  $12/38$ (win)       $26/38$ (lose)

Transition probability matrix(at most 20 dollars):

[illegible]

Transition probability matrix(at most 30 dollars):

[illegible]