

Monopoly Requirements as Test Tables

by Mike Rieser

Dice

Die1	Die2	Total?
1	6	7
1	1	2
6	6	12

2 to 8 Players Can Play

# Scenario	Number of Player Tokens	Create?
Lower Bound	2	OK
Upper Bound	8	OK
Zero Players	-	Error
One Player	1	Error
Duplicate Tokens	Car, Car	Error
Too Many	9+	Error

Initial Conditions – Location

Player	Location?
Shoe	GO
Car	GO
Horse	GO

Play One Round

Player	Turns Played	Event	Turns Played?
Shoe	0	PlayRound	1
Car	0	PlayRound	1
Horse	0	PlayRound	1

Player Movement

Player	Location (Start)	Move (Spaces)	Location?
Shoe	GO	7	Space 7
Car	Space 36	6	Space 2
Horse	GO	40	GO

Initial Conditions – Money

Player	Cash?
Shoe	\$1,500
Car	\$1,500
Horse	\$1,500

LandsOn or PassBy GO

Test Per Facade

Player	Location (Start)	Cash (Start)	Move (Spaces)	Cash?
Shoe	GO	\$1,500	10	\$1,500
Car	Space 36	\$1,500	6	\$1,700
Horse	GO	\$1,500	40	\$1,700

Test Per Class

Player	Cash	Event	Cash?
Shoe	\$1,500	LandsOn	\$1,700
Car	\$1,500	PassBy	\$1,700

LandsOn Go-To-Jail

Test Per Facade

Player	Location (Start)	Move (Spaces)	Location?
Shoe	Space 20	10	Jail
Car	Space 20	11	Space 31

Test Per Class

Player	Event	Location?
Shoe	LandsOn	Jail
Car	PassBy	–

Luxury-Tax

Test Per Facade

Player	Location	Total Worth	Move	Location?	Total Worth?
Shoe	Space 36	\$100	2	Luxury-Tax	\$25
Car	Space 36	\$75	2	Luxury-Tax	\$0
Hat	Space 36	\$25	2	Luxury-Tax	-\$50

Test Per Class

Player	Total Worth	Event	Total Worth?
Shoe	\$100	LandsOn	\$25
Car	\$75	LandsOn	\$0
Hat	\$25	LandsOn	-\$50

Income-Tax

Test Per Facade

Player	Location	Total Worth	Move	Location?	Total Worth?
Shoe	Space 2	\$4,000	2	Income-Tax	\$3,800
Car	Space 2	\$1,500	2	Income-Tax	\$1,350
Hat	Space 2	\$0	2	Income-Tax	\$0
Horse	Space 2	\$2,000	2	Income-Tax	\$1,800
Dog	Space 36	\$0	8	Income-Tax	\$180

Test Per Class

Player	Total Worth	Event	Total Worth?
Shoe	\$4,000	LandsOn	\$3,800
Car	\$1,500	LandsOn	\$1,350
Hat	\$0	LandsOn	\$0
Horse	\$2,000	LandsOn	\$1,800
Dog	\$2,000	PassBy	\$2,000

Income-Tax

Test Per Facade

Player	Location	Total Worth	Move	Location?	Total Worth?
Shoe	Space 2	\$4,000	2	Income-Tax	\$3,800
Car	Space 2	\$1,500	2	Income-Tax	\$1,350
Hat	Space 2	\$0	2	Income-Tax	\$0
Horse	Space 2	\$2,000	2	Income-Tax	\$1,800
Dog	Space 36	\$0	8	Income-Tax	\$180

Test Per Class

Player	Total Worth	Event	Total Worth?
Shoe	\$4,000	LandsOn	\$3,800
Car	\$1,500	LandsOn	\$1,350
Hat	\$0	LandsOn	\$0
Horse	\$2,000	LandsOn	\$1,800
Dog	\$0	PassBy	\$0

Real Estate Data

Name	Location	Price	Rent	Color Group
Mediterranean Avenue	1	\$60	2	Purple
Baltic Avenue	3	\$60	4	Purple
Oriental Avenue	6	\$100	6	Light-Blue
Vermont Avenue	8	\$100	6	Light-Blue
Connecticut Avenue	9	\$120	8	Light-Blue
St. Charles Place	11	\$140	10	Violet
States Avenue	13	\$140	10	Violet
Virginia Avenue	14	\$160	12	Violet
St. James Place	16	\$180	14	Orange
Tennessee Avenue	18	\$180	14	Orange
New York Avenue	19	\$200	16	Orange

Name	Location	Price	Rent	Color Group
Kentucky Avenue	21	\$220	18	Red
Indiana Avenue	23	\$220	18	Red
Illinois Avenue	24	\$240	20	Red
Atlantic Avenue	26	\$260	22	Yellow
Ventnor Avenue	27	\$260	22	Yellow
Marvin Gardens	29	\$280	22	Yellow
Pacific Avenue	31	\$300	26	Green
North Carolina Avenue	32	\$300	26	Green
Pennsylvania Avenue	34	\$320	28	Green
Park Place	37	\$350	35	Dark-Blue
Boardwalk	39	\$400	50	Dark-Blue

Utilities Data

Name	Location	Price
Electric Company	12	\$150
Water Works	28	\$150

Utility Rent

If 1 Utility owned, the rent is 4x the amount shown on the dice.

If both Utilities owned, the rent is 10x the amount shown on the dice.

(Do not roll again. It's the movement dice roll which is used.)

Railroads Data

Name	Location	Price
Reading Railroad	5	\$200
Pennsylvania Railroad	15	\$200
B. & O. Railroad	25	\$200
Shortline Railroad	35	\$200

Number Player Owns	Rent?
1	\$25
2	\$50
3	\$100
4	\$200

LandsOn Property

Space	Price	Rent
Baltic Ave	\$60	\$4

Player	Property Owner	Player Cash	Owner Cash	Event	Property Owner?	Player Cash?	Owner Cash?
Shoe	–	\$100	–	LandsOn	Shoe	\$40	\$40
Shoe	Shoe	\$100	\$100	LandsOn	Shoe	\$100	\$100
Shoe	Dog	\$100	\$10	LandsOn	Dog	\$96	\$14