

## Monopoly Mayhem

The game of Monopoly was created in 1935. Since then it has been published in 26 languages and is available in 80 countries across the world with over 200 million sets sold. In an online poll the public decided which 22 counties should be represented in the 'Here & Now All-Ireland Edition' and which should be the most expensive.

For those of you who have never played, you move around a board with the option to purchase the property that you land on. As a property tycoon you are trying to bankrupt your fellow players and take home all the loot.

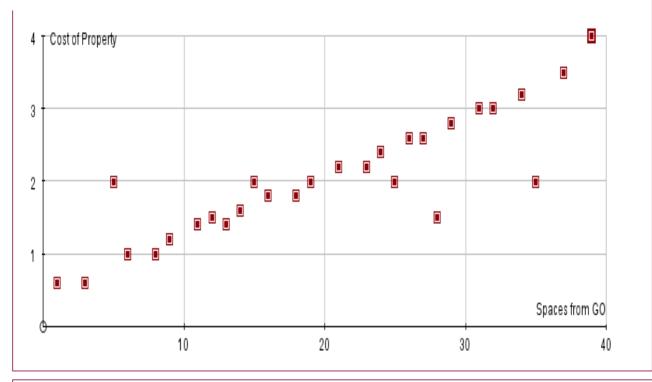
Property	Spaces from Go	Cost
Westmeath	1	€600k
Donegal	3	€600k
Munster	5	€2.0m
Sligo	6	€1.0m
Down	8	€1.0m
Laois	9	€1.2m
Tyrone	11	€1.4m
Telecoms	12	€1.5m
Cavan	13	€1.4m
Kerry	14	€1.6m
Connaught	15	€2.0m
Fermanagh	16	€1.8m
Leitrim	18	€1.8m
Galway	19	€2.0m
Meath	21	€2.2m
Kilkenny	23	€2.2m
Offaly	24	€2.4m
Leinster	25	€2.0m
Mayo	26	€2.6m
Dublin	27	€2.6m
Internet	28	€1.5m
Louth	29	€2.8m
Wexford	31	€3.0m
Limerick	32	€3.0m
Waterford	34	€3.2m
Ulster	35	€2.0m
Cork	37	€3.5m



The properties vary in price. The more popular locations, like Cork, will, of course, cost you more. Looking at the table opposite, can you see a relationship between the spaces from GO and how much the property costs? One way of displaying this information is to plot a scatter graph. It clearly shows any patterns or trends in the data and helps you describe the relationship between the two variables (the things you are comparing - see the axis labels). Either plot this yourself, or use the graph ready prepared on the next page.







Can you see a relationship between 'Spaces from GO' and the 'Cost' of the property? Write a sentence to describe it. Are there any points that do not seem to fit the trend? Without looking at the table can you guess which properties they are?

In order to show the trend more clearly we can draw on the graph a 'Line of Best Fit', or 'Trendline'. Draw a line on your graph (or the one above) which best fits the points. We use this line to make estimates. For example, if you put a property 22 spaces away from GO, how much do you think it should cost? Why would this only be an estimate? All straight lines can be written in the format y=mx+c. This describes the relationship between the x axis variable and the y axis variable. Find out what the 'm' and 'c' mean and try to calculate the equation of your Line of Best Fit.

You can use this equation to help you predict what might happen. Use your equation to find out the cost of a property that is 50 spaces away from GO. Why might this not be right? What assumptions would you be making?

In Monopoly you throw two dice for your turn. On your first go, how many spaces from 'GO' are you most likely to end up? Why? The makers, Hasbro, tell us that the most landed on properties are Fermanagh, Leitrim and Galway (the orange ones). Can you think why? Discuss with your class.

There are 10 tokens in a traditional Monopoly set: Cannon, Boot, Dog, Train, Car, Iron, Top Hat, Thimble, Horse and Wheelbarrow.

If you had first choice at the start of the game, and you picked one at random, what is the chance of you picking an animal? Would this probability be the same if you were choosing for yourself? Why?

Graph created using Autograph V 3
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