Number of draws in Lotto 6/49	Expected number of occurrences	Acceptable number of occurrences of a given number	
		95% confidence	99.5% confidence
–	–	–	–
40	5	1 to 9	0 to 10
41	5	1 to 9	0 to 11
42	5	2 to 9	0 to 11
43	5	2 to 9	0 to 11
44	5	2 to 9	0 to 11
45	6	2 to 9	0 to 11
46	6	2 to 10	0 to 12
47	6	2 to 10	0 to 12
48	6	2 to 10	0 to 12
49	6	2 to 10	0 to 12
50	6	2 to 10	0 to 12
51	7	2 to 11	0 to 13
52	7	2 to 11	0 to 13
54	7	2 to 11	0 to 13
55	7	3 to 11	0 to 13
56	7	3 to 11	1 to 13

Table E.1. The acceptable number of occurrences of a specific number in the drawings of lotto 6/49. The entries were obtained by applying the Fisher Exact Test for smaller numbers of drawings (not shown), and the Chi-squared Goodness-of-Fit Test for larger numbers of drawings corresponding to expected frequencies of five or more of the given number.

E.3 The chance that a specific number is not picked in a given number of draws

Take a specific number, say 5. We saw above that the chance in lotto 6/49 for 5 to be picked in a draw is 6 times 1/49; which is 6/49. We want the probability that 5 is not picked in a given number of draws, given that it is picked in the draw following that number of draws.

To compute this we need to use the Conditional Probability Formula which is this:

$$P(A \mid B) = \frac{P(A \cap B)}{P(B)},$$