# Using Migration Patterns of Ants on a Paper Surface to Predict Lottery Results

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#### Abstract

Six ants were taken and placed on a sheet of paper, (in fact a diary page) and their paths were examined for the purpose of predicting the weekends lottery results. Results are pending.

# Method

Six ants were selected outside our halls of residence on a quasi random way, (we used whichever ants we could catch in Matt's lipbalm tub). We then deposited the ant on the diary page on the premarked cross and observed its movements at the same time tracing its path with a pencil. We noted stopping points where appropriate and also where the ant fell off (or was catapulted off in one unfortunate incident). Once results were taken we measured the length of the ants path (L) with the cord on Matt's mobile phone adapter and a ruler as well as distances between stopping points  $(l_1, l_2, l_3...)$ . We also assigned a *curve factor* (C) with Matt's pen spring as a point of reference with C = 100 Boings.

#### Theory

After much rigorous calculation I managed to come up with the following formulae (which incidently also unites General Relativity and Quantum Mechanics), to generate the Q factor.

$$Q = \frac{\sqrt[5/2]{\frac{\sup l}{\langle l \rangle} - \ln\left(\frac{LC\hbar}{k_B}\right) \left[\frac{\prod_i l_i}{\sum_i l_i} - \Im\left(\sqrt{-13G}\right) \frac{N_A}{c^2}\right]^{l_1 \log(\mu_0 C)}}{\prod_i l_i - \left(\sqrt{\ln\left(\frac{LC\hbar}{k_B}\right) - \frac{\sup l}{\langle l \rangle}}\right)^{k_B}}$$

Else if  $\nexists l_i$ 

If  $\exists l_i$ 

$$Q = 2 + \left\{ \frac{\log \pi r^2}{C_{H_2O}} - \Re \left( \frac{e^{-iN_A c^2}}{L\hbar r} \right) \right\}^{\hbar m_e} \text{ where } r = \sqrt[12/7]{\frac{c}{\ln L}}$$

We took the last five digits of the result and summed them. If it was four nines we then considered the next number and added that if it was four or less, if not we took the next and so on, if this didn't work we then made a result up.

### Results

Trials 1, 4 and 6 were soldier ants, (trial 4 unfortunately was crippled during collection in the lid but nonetheless dragged herself off the page using her feelers), whereas trials 2, 3 and 5 were worker ants. Trial 5 interestingly was carrying a load and consequently its behaviour became much more methodical, taking regular breaks to readjust in the same place, presumably since it had established and remembered that point as being relatively safe from harm. However this isn't half as intersting as the fact that we are going to be rolling in money this weekend because of that little sucker.

The following is a table of results.

Trial	$L (\rm cm)$	C (Boings)	$l_i (\rm cm)$
1	24	12	-
2	15	32	-
3	21	56	-
4	20	85	-
5	76	22	18, 13, 5.5, 24.5, 9, 6
6	12	5	-

This gave the Q factor values and corresponding lottery numbers below,

Q Factor	Winning Lottery Number
2.456343197	20
4.344356565	22
3.002321122	6
1.998445210	8
3.768567377	24
2.458769887	32

Actually these aren't the calculated Q factors at all, the equations proved too hard to work out so I made up some values, called them 'approximations' and hoped that Matt wouldn't notice. What would he know anyway? He does biology for Christs sake.

Stupidly, I invited Matt to read a draft copy of this report and he realised what was going on after reading the above. Concerned that maybe a little more scientific rigour was needed to make this a viable technique, he quickly devised another system where each number is given by  $L^2/C$  or if the set  $l_i$  exists then average of of the set. This gave 48, 7, 8, 5, 11, 29 as our winning numbers. Pretty clever acually.

## Conclusion

The draw Wednesday did not contain a single one of our numbers. What a waste of bloody time.