Discuss the Concepts

1. *Comparative Statics*. Suppose the start-up lottery is for your new food cart in a city. Starting from the lottery shown in Figure [15.2](https://d.docs.live.net/830893216078b129/Documents/OUP%20PM%20for%20SPI/O'Sullivan_Behavioral%20Econ%201e/04%20From%20CE/Final%20Edited%20files/Figure_fcr_20), consider the effects of following changes.
2. A potential competitor relocates a nearby food cart, increasing your probability of success to 0.75. The certainty equivalent [\_\_\_] (↑, ↓, does not change) to $[\_\_\_].
3. A new housing development in the neighborhood increases the number of potential customers, increasing the gain to $1156. The certainty equivalent [\_\_\_] (↑, ↓, does not change) to $[\_\_\_].
4. The long-term lease for the food-cart pad doubles in length, increasing the loss to $100. The certainty equivalent [\_\_\_] (↑, ↓, does not change) to $[\_\_\_].
5. *Highest Bidder*. Imagine that you are selling a stake in your start-up company to the highest bidder. The associated lottery is the start-up lottery in Figure [15.1](https://d.docs.live.net/830893216078b129/Documents/OUP%20PM%20for%20SPI/O'Sullivan_Behavioral%20Econ%201e/04%20From%20CE/Final%20Edited%20files/Figure_fcr_21). Rootone has a square-root utility function and loss neutrality, with λ = 1. Linthree has a linear utility function *u*(*x*) = 10 ⋅ *x* and greater weight of loss, with λ = 3.
6. Rootone’s bid is [\_\_\_]. Illustrate.
7. Linthrees bid is [\_\_\_]. Illustrate.
8. *Neighborly Certainty Equivalent*. Use Widget 15.3 to compute the value of your utility parameter μ for gain. Suppose you are offered a lottery with a 25 percent chance of a $144 gain. Your willingness to pay is *c*(L) = [\_\_\_]. Use the results from three neighbors to plot four points on a curve showing the relationship between μ (on the horizontal axis) and the certainty equivalent (on the vertical axis).
9. *Rat Certainty Equivalent*. Consider the results of the experiments with thirsty lab rats.
10. The typical rat would be indifferent between a lottery with equal chances of gaining 36 ounces or losing 4 ounces and a certain [\_\_\_] ounces.
11. Suppose, as an approximation, we assume μ = 0.50 and λ = 2. The resulting certainty equivalent would be [\_\_\_] (>, <, =) to the value computed in (a) because [\_\_\_].