Week 2 Discussion

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Raining cats

The New York Times

EVERY year, scores of cats fall from open windows in New York City. From June 4 through Nov. 4, 1984, for instance, 132 such victims were admitted to the Animal Medical Center on 62d Street in Manhattan.

Most of the cats landed on concrete. Most survived. Experts believe they were able to do so because of the laws of physics, superior balance and what might be called the flying-squirrel tactic.
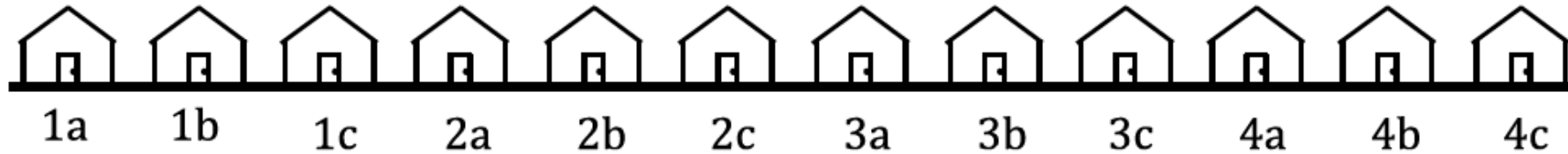
Even more surprising, the longer the fall, the greater the chance of survival.

Raining cats

"Cats may be behaving like well-trained paratroopers," Dr. Jared Diamond, who teaches physiology at the University of California at Los Angeles Medical School, wrote in the August issue of the magazine Natural History.

Do you agree with Dr. Jared's statement?

Sampling

1. Kalie wants to measure interest for a party on her street. She assigns numbers and letters to each house on her street as illustrated above. She picks a letter "a", "b", or "c" at random and then surveys every household on the street ending in that letter

   1. What is the probability that Kalie surveys house '2b'?

   2. What is the chance that two houses next door to each other are both in the sample?

   3. Now suppose Kalie instead picks one house beginning with '1' at random, one house beginning with '2' at random, and so on, so she surveys four houses, one of each number. What is the probability that she surveys house '2b'? Overall how has the survey changed?

Sampling

1. There are 2 blue and 2 red balls in a box. Take one at a time, no replacing. Guess the color of the ball, you receive a dollar if you are correct. What is the dollar amount you would pay to play this game?