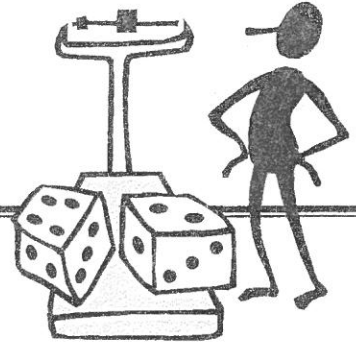


Chapter 14: From Randomness to Probability



Key Vocabulary:

- probability
- trial
- outcome
- event
- independent
- Law of Large Numbers
- complement
- disjoint
- mutually exclusive

1. In statistics, what is meant by the term *random*?
2. In statistics, what is meant by *probability*?
3. What does it mean for trials to be *independent*?
4. How is the *Law of Large Numbers* related to probability?
5. In statistics, what is an *event*?
6. Explain why the probability of any *event* is a number between 0 and 1.
7. What is the sum of the probabilities of all possible *outcomes*?
8. Describe the probability that an *event* does not occur?
9. What is meant by the *complement* of an event?
10. When are two events considered *disjoint*?
11. What is the probability of two *disjoint* events?
12. What is the *Multiplication Rule* for *independent* events?

13. Can *disjoint* events be *independent*?

14. If two events A and B are *independent*, what must be true about A^c and B^c ?

15. What is meant by the *union* of two or more events? Draw a diagram.

16. State the addition rule for *disjoint* events.

17. What is meant by the *intersection* of two or more events? Draw a diagram.

18. Explain the difference between the *union* and the *intersection* of two or more events.