



Probability Concepts Checklist

Achievement

I can:

- Calculate simple theoretical probabilities (coin flips, dice rolls, etc.)
- Calculate simple empirical probabilities from data
- Construct and use two-way tables
- Construct and use tree diagrams
- Construct and use Venn diagrams
- Identify independent events
- Identify mutually exclusive events
- Calculate basic conditional probabilities
- Interpret probability values between 0 and 1

Merit

I can:

- Calculate complex conditional probabilities
- Compare conditional probabilities to analyze situations
- Use probability calculations in a multi-step process
- Determine if the assumption of independence is reasonable
- Determine if the assumption of equally likely outcomes is reasonable
- Communicate probability reasoning using proper statistical language
- Relate probability concepts and values to real-world contexts

Excellence

I can:

- Model a probability situation using multiple representations
- Generalize patterns in probability distributions
- Design and conduct a probability simulation
- Use simulation results to evaluate a probability model
- Account for sampling variability when making conclusions
- Identify strengths and limitations of different probability models
- Draw insightful conclusions by synthesizing calculations and context