Intro to Statistical Tests

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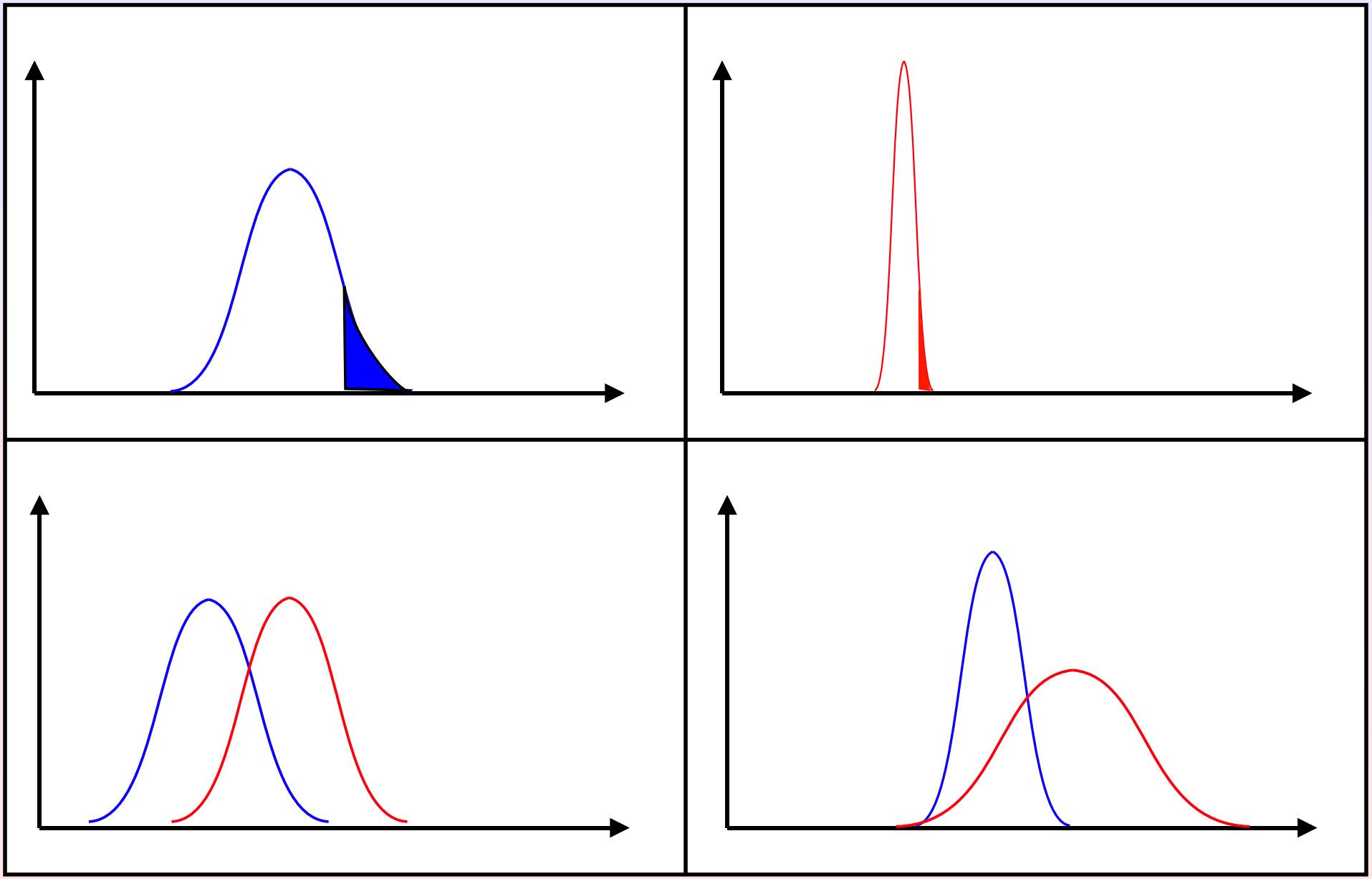
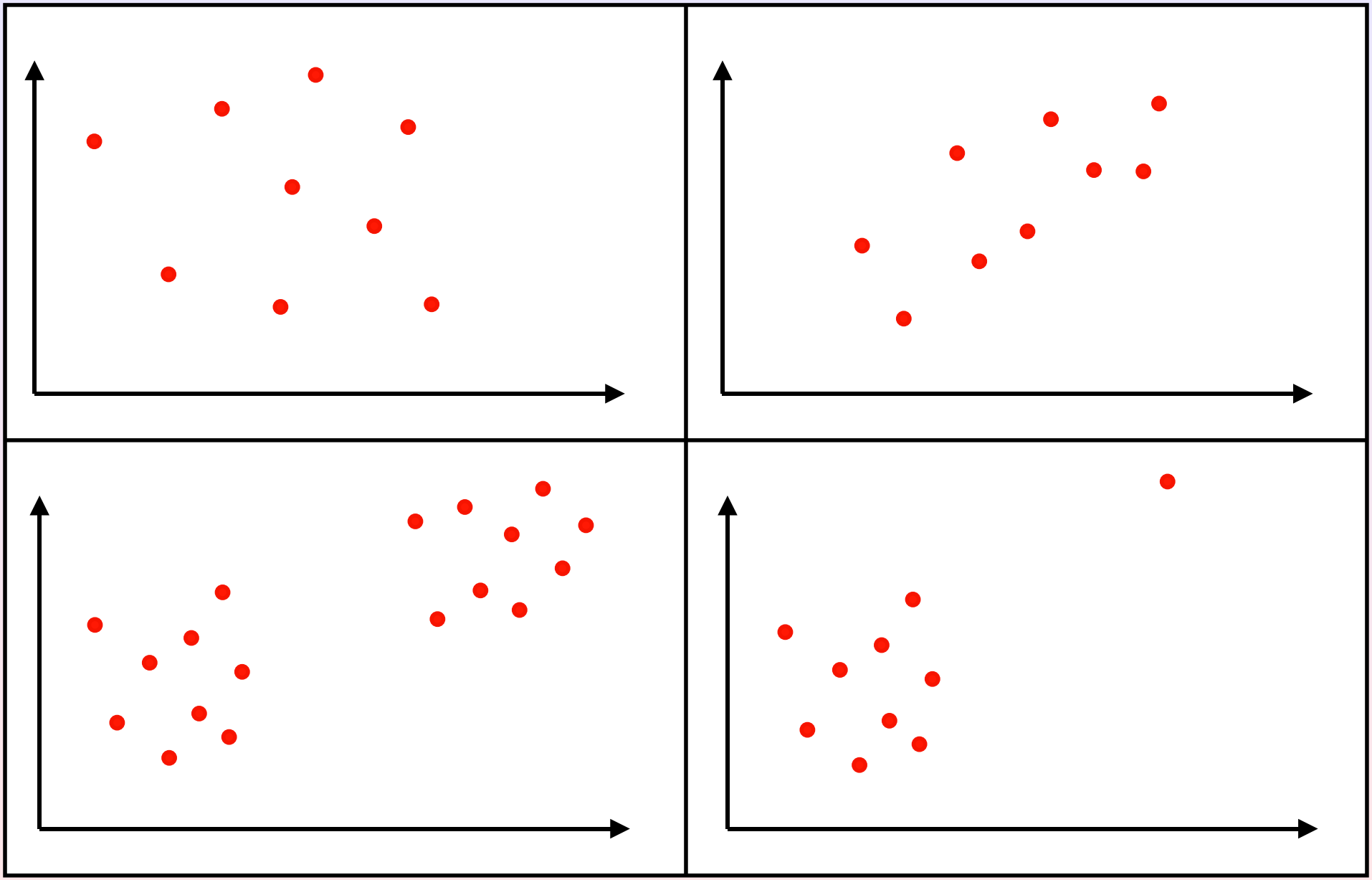
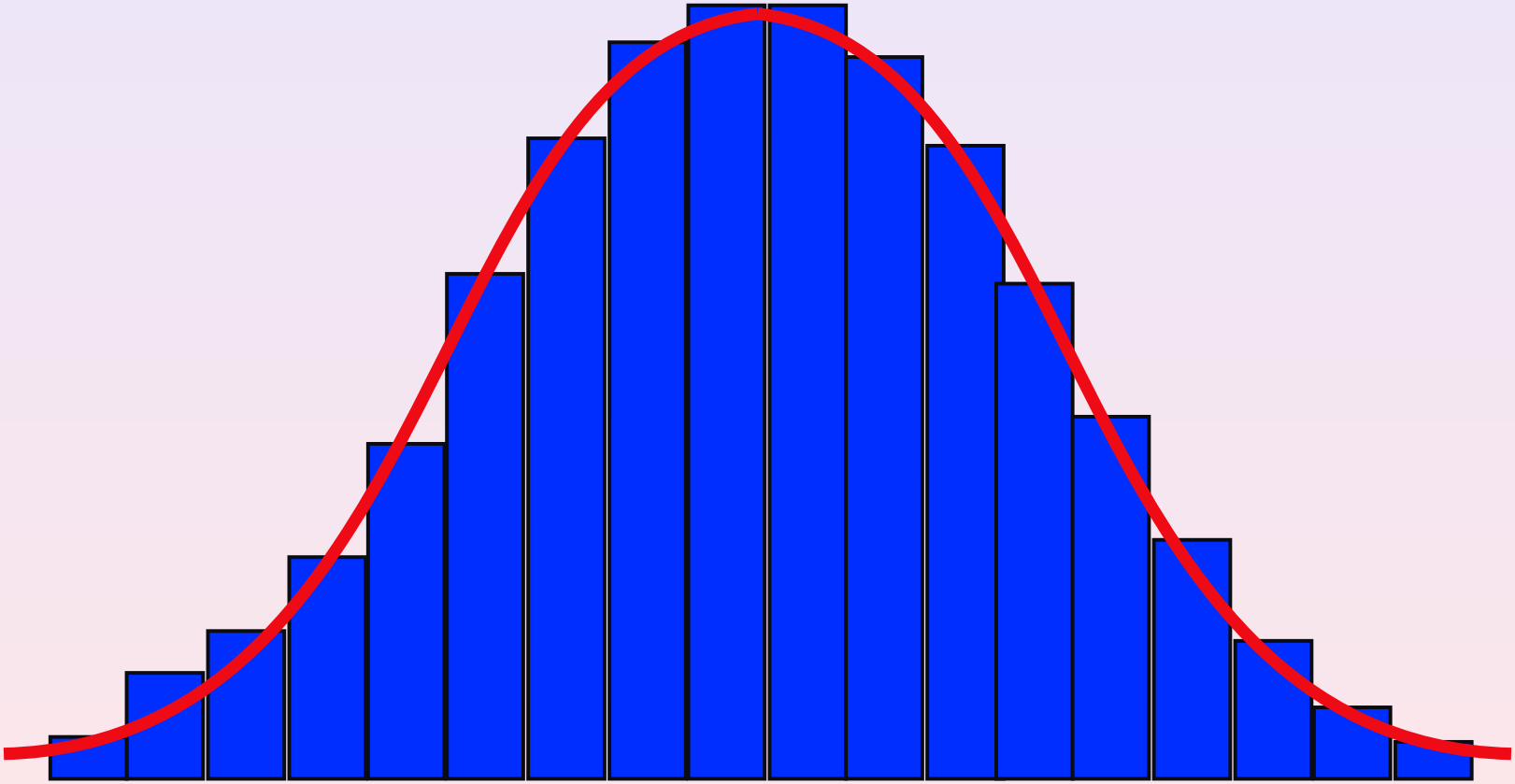
Main Types of Tests: Differences of Means or Medians



Main Types of Tests: Relationships between two variables



Main Types of Tests: Goodness of Fit or Association



In-Class Exercise

Generate 8 columns of normally distributed random numbers, 4 with length 25, 4 with length 100, with the following means and standard deviations

- A: Mean = 0, std dev =1
- B: Mean = .25, std dev =1
- C: Mean = 0, std dev =10
- D: Mean = .25, std dev =10

Perform the following:

- Generate descriptive stats and histograms for each
- Determine 5% and 95% values for data distribution and for mean distribution (use standard error of the mean)
- t-test of mean of A and B
- t-test of mean of C and D
- t-test of mean of A and D