

- qualitative vs. quantitative variables
- box and whisker plots
- correlation coefficient
- coefficient of determination
- residuals
- outlier, influential point
- properties of normal distribution, find sd and mean for a normal dist.
- z-scores
- mean, median, mode for a data set, weighted mean
- probability involving two dice
- independent events (e.g., multiple choice test)
- additive principle for probability (e.g., how many students enrolled in A OR B?)
- conditional probability (e.g., male-female vs. subjects, in table form)
- identifying dependent events
- definition of a simulation
- experimental probability tossing a coin
- permutations notation (writing, working with it)
- combinations notation (writing, working with it)
- characteristics of a binomial experiment
- definition of a discrete random variable
- expected value (e.g., rolling a single die, family having so many g/b if they want x children)
- binomial vs geometric vs hypergeometric distributions

Part B—Application & Communication (Tentative: Select 3 of 5 sets to answer)

Set 1:

-experimental probability, tree diagram for multiple-choice test

Set 2:

-expected value, working with equation involving permutations

Set 3:

-z-scores

Set 4:

-histogram, scatter plot/regression equation/r-value/making a prediction using model

Set 5:

-probability distributions

Part C—TIPS (Tentative: Answer 2 of the 4)

-regression analysis (must determine if line or curve is appropriate), use regression equation to answer the problem

-median of a data set

-probability of independent events

-probability distributions