Mathematics $\quad$ RIT Score Range: 241 - 250

Goal: Statistics and Probability
RIT Score Range:
241-250

| Skills and Concepts to Enhance (73\% Probability*) 231-240 | Skills and Concepts to Develop (50\% Probability*) 241-250 | Skills and Concepts to Introduce (27\% Probability*) $251-260$ |
| :---: | :---: | :---: |
| Interpreting Categorical and Quantitative Data | Interpreting Categorical and Quantitative Data | Interpreting Categorical and Quantitative Data |
| - Determines appropriate intervals and/or scale for a bar graph <br> - Interprets data given in horizontal and vertical bar graphs to solve problems <br> - Reads and interprets data in box-and-whisker plots <br> - Determines the mean of a complex set of data (e.g., fractions, integers, many data points) <br> - Solves problems with missing data when the mean is known <br> - Determines the median from a complex set of data (e.g., not in order, many data points) <br> - Determines the range of a complex set of data <br> - Estimates line of best fit to make predictions | - Reads and interprets data in tables <br> - Reads and interprets data in box-and-whisker plots <br> - Reads and interprets interquartile range in box-and-whisker plots <br> - Reads and interprets data in stem-and-leaf plots <br> - Determines the range of a complex set of data <br> - Identifies outliers on a data display (e.g., uses interquartile range to identify outliers on a box-and-whisker plot) <br> - Determines the correlation for a set of data <br> - Identifies a set of data with a given mean, median, and/or mode | - Interprets the meaning of slope and intercepts in problem solving situations <br> - Reads and interprets interquartile range in box-and-whisker plots <br> - Solves complex problems involving mean <br> - Identifies outliers on a data display (e.g., uses interquartile range to identify outliers on a box-and-whisker plot) <br> - Computes and compares mean, median, mode, and range in simple examples to demonstrate that they may differ for a given set of data |
| Using Sampling and Probability to Make Decisions | Using Sampling and Probability to Make Decisions | Using Sampling and Probability to Make Decisions |
| - Determines probability - must determine size of sample space <br> - Modifies sample space to change the probability of an event <br> - Determines the probability of independent simple compound events <br> - Determines the possible outcomes for a simple probability experiment using dart boards <br> - Determines the outcome of simple multiple events <br> - Uses the results of probability experiments or events to predict future events <br> - Predicts from an analysis of data and statistical measures <br> - Predicts from charts and tables <br> - Describes the population based on a given sample | - Determines probability using counting procedures <br> - Determines probability using tables <br> - Determines the complement of a complex event <br> - Determines probability using an area model <br> - Uses theoretical probability to predict future events <br> - Predicts from an analysis of data and statistical measures <br> - Describes the population based on a given sample | - Determines the probabilities of complex compound events (independent) <br> - Uses random sampling techniques |
| New Vocabulary: box-and-whisker plot, data point, interquartile range, middle, representative sample, sample | New Vocabulary: None | New Vocabulary: None |
| middle, representative sample, sample <br> New Signs and Symbols: ${ }^{\circ} \mathrm{F}$ degrees Fahrenheit | New Signs and Symbols: • outlier | New Signs and Symbols: None |

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[^0]:    Explanatory Notes
    

