

# Math ISAT: Data Analysis, Probability, Statistics

## Skills: Basic Concepts of Probability

Students:	<b>RIT Above 260:</b> <ul style="list-style-type: none"> <li>Determines the probabilities of compound events (dependent)</li> </ul>
Students:	<b>RIT 251-260:</b> <ul style="list-style-type: none"> <li>Determines certainty from a set data</li> <li>Determines the probabilities of complex compound events (independent)</li> </ul>
Students:	<b>RIT 241-250:</b> <ul style="list-style-type: none"> <li>Determines probability using tables</li> <li>Determines probability using an area model</li> <li>Determines probability using counting procedures</li> <li>Determines certainty from a set data</li> <li>Uses counting procedures to determine probabilities</li> <li>Determines the complement of a complex event</li> <li>Uses permutation and combination formulas to determine possibilities</li> </ul>
Students:	<b>RIT 231-240:</b> <ul style="list-style-type: none"> <li>Recognizes the relationship between events and probability</li> <li>Determines sample space using probability</li> <li>Determines sample space to find probability</li> <li>Determines sample space to find probability for 2-step problems</li> <li>Determines certainty from a set data</li> <li>Determines the complement of a complex event</li> <li>Determines the probability of independent simple compound events</li> </ul>
Students:	<b>RIT 221-230:</b> <ul style="list-style-type: none"> <li>Determines the possible outcomes for a simple probability experiment using spinners</li> <li>Determines the possible outcomes for a simple probability experiment using dart boards</li> <li>Determines the outcome of simple multiple events</li> <li>Determines sample space to find probability</li> <li>Determines probability using tree diagrams</li> <li>Computes probability as a fraction, given equivalent forms</li> <li>Explains the relationship between probability and odds, and computes one when given the other</li> <li>Determines the complement of a simple event</li> <li>Determines the number of possible combinations of given items</li> <li>Solves problems involving combinations</li> </ul>
Students:	<b>RIT 211-220:</b> <ul style="list-style-type: none"> <li>Determines the possible outcomes for a simple probability experiment using a frequency table</li> <li>Determines the possible outcomes for a simple probability experiment using dice</li> <li>Determines the possible outcomes for a simple probability experiment using spinners</li> <li>Determines probability when drawing objects from containers</li> <li>Determines probability from a real-world situation</li> <li>Determines the complement of a simple event</li> <li>Determines the number of possible combinations of given items</li> <li>Solves problems involving permutations</li> </ul>
Students:	<b>RIT 201-210:</b> <ul style="list-style-type: none"> <li>Recognizes events that are certain, likely, unlikely, possible, or impossible</li> <li>Uses the concept of chance to determine the likelihood of an event</li> <li>Determines the possible outcomes for a simple probability experiment using one or more coins</li> <li>Determines the possible outcomes for a simple probability experiment using objects</li> </ul>
Students:	<b>RIT 191-200:</b> <ul style="list-style-type: none"> <li>Investigates probability of "more likely" or "less likely" using a spinner</li> <li>Investigates probability of "more likely" or "less likely" with a dart board</li> </ul>
Students:	<b>RIT 181-190:</b> <ul style="list-style-type: none"> <li>Investigates probability of "more likely" or "less likely" using a spinner</li> <li>Investigates probability of "more likely" or "less likely" with objects hidden in containers</li> </ul>
Students:	<b>RIT 171-180:</b> <ul style="list-style-type: none"> <li>Investigates probability of "more likely" or "less likely" using a table</li> </ul>
Students:	<b>RIT Below 171:</b> <ul style="list-style-type: none"> <li><i>No Skills Listed</i></li> </ul>