

# Math DesCartes: Algebra, Functions, and Mathematical Models

Skills: Applies Functions to a Variety of Problems

| Students: | DesCartes Skills:<br><small>(Highlight the skills related to your chosen standard/concept)</small>  |
|-----------|---|
|           | <b>RIT Above 260:</b> <ul style="list-style-type: none"> <li>• Determines the slope of perpendicular lines</li> <li>• Determines the slope of parallel lines</li> <li>• Determines x- or y-intercept of a given equation</li> <li>• Determines slope from an equation (analysis)</li> <li>• Solves logarithmic functions</li> </ul>   |
|           | <b>RIT 251-260:</b> <ul style="list-style-type: none"> <li>• Represents a real-world function using a complex equation (e.g., distributive, rational)</li> <li>• Models real life functions using function notation</li> <li>• Determines the slope of perpendicular lines</li> <li>• Determines the slope of parallel lines</li> <li>• Determines slope from an equation (analysis)</li> <li>• Determines slope from ordered pairs and tables</li> <li>• Interprets the meaning of slope and intercepts in problem solving situations</li> <li>• Solves logarithmic functions</li> </ul> |
|           | <b>RIT 241-250:</b> <ul style="list-style-type: none"> <li>• Represents a real-world function using a complex equation (e.g., distributive, rational)</li> <li>• Models real life functions using function notation</li> <li>• Solves problems involving complex functions</li> <li>• Using the slope of an equation, identifies parallel and perpendicular lines</li> <li>• Determines slope from an equation</li> <li>• Identifies and describes situations with varying rates of change</li> <li>• Performs operations on functions</li> </ul>   |
|           | <b>RIT 231-240:</b> <ul style="list-style-type: none"> <li>• Represents real-world functions using an equation</li> <li>• Solves problems involving simple functions</li> <li>• Models real life functions using function notation</li> <li>• Solves problems involving complex functions</li> <li>• Using the slope of an equation, identifies parallel and perpendicular lines</li> <li>• Determines slope from an equation</li> </ul>  |
|           | <b>RIT 221-230:</b> <ul style="list-style-type: none"> <li>• Solves problems involving simple functions</li> <li>• Investigates and describes functional relationships of geometric figures (e.g., area is a function of the radius)</li> </ul>   |
|           | <b>RIT 211-220:</b> <ul style="list-style-type: none"> <li>• Solves problems involving simple functions</li> </ul>  |

**Lesson Title:**

**Standard/Concept for All:**

**For Students Ready for a Challenge:**

Lesson/Activity:

Resources:

Means of Assessment:

**For Most Students:**

Lesson/Activity:

Resources:

Means of Assessment:

**For Students Needing Extra Support:**

Lesson/Activity:

Resources:

Means of Assessment:

**Closure/Summary for All:**