



# Mathematics

## ISAT Goal: Algebra

**Subskill:** Patterns, Sequences, Functions

**RIT 261-270:**

- Determine the domain of independent variables and the range of dependent variables in a relation that is defined by a graph, a set of ordered pairs, or a symbolic expression; Analyze properties and relationships of functions (e.g. linear, polynomial, rational)

**RIT 251-260:**

- No skills listed

**RIT 241-250:**

- Students analyze a given set of data for the existence of a pattern and represent the pattern algebraically and graphically; Determine whether a relation is defined by a graph, a set of ordered pairs, or a symbolic expression is a function and justify the conclusion; Use a function table to determine inverse variation

**RIT 231-240:**

- Using whole numbers, complete a function table based on a given rule; Graph linear functions, noting that the vertical change (change in y-value) per unit of horizontal change (change in x-value) is constant; Identify linear equation for a straight line

**RIT 221-230:**

- Complete a function table according to a rule; Recognize and continue a number pattern and/or geometric representation (e.g. Fibonacci sequence, triangular numbers); State a rule to explain a number pattern, including arithmetic progression; Investigate geometric patterns and relationships and describe them algebraically

**RIT 211-220:**

- Use logic to solve a problem involving a function table

**RIT 201-210:**

- Use of a function “machine” to determine input and output

**RIT 191-200:**

- Count and write by 4’s; Find and extend patterns

**RIT 181-190:**

- Find and extend patterns, both increasing and decreasing; Complete a number pattern; Complete a table according to a rule; Choose and apply an appropriate problem solving strategy: Find a pattern

**RIT 171-180:**

- Recognize and extend a pattern: shape, color and size; Compare objects by shape, size, height, or length (larger, smaller, taller, shorter, longer)

**RIT 161-170:**

- No skills listed

**RIT 151-160:**

- Find and extend patterns; Recognize and extend a pattern: shape, color and size

Student List:

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