

Math ISAT: Mathematical Reasoning and Problem Solving

Skills: Appropriate Technology and Models

Students:	RIT Above 260: <ul style="list-style-type: none">• Uses technology to organize, record, and communicate mathematical ideas
Students:	RIT 251-260: <ul style="list-style-type: none">• Uses technology to organize, record, and communicate mathematical ideas
Students:	RIT 241-250: <ul style="list-style-type: none">• Uses technology to organize, record, and communicate mathematical ideas• Uses a number line to determine the distance between a positive and negative number
Students:	RIT 231-240: <ul style="list-style-type: none">• Uses technology to organize, record, and communicate mathematical ideas• Uses models to multiply and divide fractions and connect the actions to algorithms• Uses models to multiply and divide fractions and mixed fractions and connect the actions to algorithms
Students:	RIT 221-230: <ul style="list-style-type: none">• Uses technology to generate and analyze data to solve problems• Uses a number line to determine the midpoint between a positive and negative number
Students:	RIT 211-220: <ul style="list-style-type: none">• Uses technology to generate and analyze data to solve problems• Models whole number multiplication and division algorithms (e.g., uses physical materials to show 4 groups of 3 objects)
Students:	RIT 201-210: <ul style="list-style-type: none">• Uses calculators as problem solving tools (e.g., to explore patterns, to validate solutions)• Uses technology to gather, analyze, and communicate mathematical information• Models whole number multiplication and division algorithms (e.g., uses physical materials to show 4 groups of 3 objects)• Uses models to add and subtract fractions and connect the actions to algorithms• Uses a number line to model multiplication
Students:	RIT 191-200: <ul style="list-style-type: none">• Uses calculators as problem solving tools (e.g., to explore patterns, to validate solutions)• Uses technology to gather, analyze, and communicate mathematical information• Models whole number multiplication and division algorithms (e.g., shows multiplication as repeated addition and division as repeated subtraction)• Uses models to add and subtract fractions and connect the actions to algorithms• Uses a number line to construct subtraction facts with subtrahends and minuends through 20 (whole numbers)
Students:	RIT 181-190: <ul style="list-style-type: none">• Uses appropriate technology to solve problems• Uses models to calculate differences through 1000 (whole numbers)• Models multiplication and division algorithms using arrays (whole numbers)• Models whole number multiplication and division algorithms (e.g., shows multiplication as repeated addition and division as repeated subtraction)• Uses a number line to construct subtraction facts with subtrahends and minuends through 20 (whole numbers)
Students:	RIT 171-180: <ul style="list-style-type: none">• Uses appropriate technology to solve problems• Uses models to calculate whole number sums through 999• Uses models to calculate differences through 100 (whole numbers)• Uses models to calculate differences through 1000 (whole numbers)• Uses a number line to construct addition facts with sums through 20 (whole numbers)
Students:	RIT 161-170: <ul style="list-style-type: none">• Uses models to calculate whole number sums through 99• Uses models to calculate whole number sums through 999• Uses models to construct subtraction facts with differences through 10 (whole numbers)• Uses models to calculate differences through 100 (whole numbers)• Uses a number line to construct addition facts with sums through 20 (whole numbers)
Students:	RIT Below 161: <ul style="list-style-type: none">• Uses models to construct whole number addition facts with addends through 10• Uses models to calculate whole number sums through 99