

Math DesCartes: Numbers and Operations

Skills: Number Sense - Represent, Model, and Identify

Students:	DesCartes Skills: (Highlight the skills related to your chosen standard/concept)		
	RIT Above 260: • Defines "irrational numbers"		
	RIT 251-260: • Uses fractional and negative exponents as optional ways of representing problem situations (e.g., $27^{2/3}=(27^{1/3})^2 = 9$)		base-10 blocks • Identifies the numeral and written name for whole numbers with a zero between digits to the ten thousands place • Identifies the numeral and written name for whole numbers over 100,000 • Identifies a whole number that comes before and/or after a given number (over 100) • Solves problems using ordinal numbers • Uses number sense strategies to solve problems (addition/subtraction only) • Identifies halves of a region using nonadjacent parts
	RIT 241-250: • Identifies the ratio from a given real-world situation		
	RIT 231-240: • Identifies the ratio from a given real-world situation • Estimates percent using 2-D regions • Uses correct terminology for powers • Represents absolute value using positive and negative numbers		
	RIT 221-230: • Uses number sense strategies to judge the reasonableness of given answers (multiplication/division only) • Uses alternative algorithms to explain the meaning of "fraction" • Represents a decimal to thousandths place (e.g., three thousandths = 0.003) • Represents a decimal to the hundred thousandths place - (e.g., three hundred thousandths = 0.0003) • Writes a decimal for a shaded region to the hundredths place • Locates rational numbers on a number line • Uses concrete and pictorial models to represent ratios • Identifies the percent represented in a given model • Defines "absolute value"		RIT 191-200: • Identifies whole numbers 100 - 999 using base-10 blocks • Identifies whole numbers over 999 using base-10 blocks • Identifies the numeral and written name for whole numbers with a zero between digits to the ten thousands place • Identifies the numeral and written name for whole numbers 10,000 to 100,000 • Identifies the numeral and written name for whole numbers over 100,000 • Identifies the numeral and written name for ordinal numbers 21st to 100th (e.g., 21st is twenty-first, and vice versa) • Solves problems using ordinal numbers • Represents 1/3 with a diagram or model • Identifies one-half from a region or set • Identifies 1/4 from a region or set • Identifies 1/3 from a region or set • Identifies 2/3 or 3/3 from a region or set • Identifies tenths from a region or set • Identifies a fraction (denominators other than 2, 3, 4, 8, 10) from a region or set • Identifies a decimal on a number line to the tenths place
	RIT 211-220: • Identifies whole numbers 100 - 999 using 2-D and 3-D models • Identifies whole numbers over 999 using 2- and 3-D models • Uses number sense strategies to solve problems (multiplication/division) • Evaluates number sense strategies used to solve problems • Writes improper fractions and mixed numbers from a visual representation • Explains different interpretations of fractions (e.g., parts of a whole, parts of a set, and division of whole numbers by whole numbers) • Represents a decimal to the hundredths place (e.g., three hundredths = 0.03) • Writes a decimal for a shaded region to the tenths place • Identifies an integer from a number line • Uses correct terminology for integers • Uses concrete and pictorial models to represent proportions • Recognizes and writes proportions • Identifies the percent represented in a 2-D region		RIT 181-190: • Identifies the numeral and written name for whole numbers 101 to 999 (e.g., 342 is three hundred forty-two, and vice versa) • Identifies the numeral and written name for whole numbers to 1000 to 9999 (e.g., 3456 is three thousand, four hundred fifty-six, and vice versa) • Identifies the numeral and written name for whole numbers 10,000 to 100,000 • Identifies the number that is "1 more than" a given number • Identifies the number that is "1 less than" a given number • Counts numbers 0-1000 • Counts and writes by 3's • Counts and writes by 4's • Counts and writes by 6's, 7's, 8's, or 9's • Counts ordinal numbers (first to tenth) • Identifies the ordinal number that comes before, between, or after a given ordinal number (first to tenth) • Solves problems using ordinal numbers • Represents 1/4 with a diagram or model • Represents 3/4 with a diagram or model • Identifies equal parts by using models • Identifies 1/2 from a region or set
	RIT 201-210: • Identifies whole numbers over 999 using		

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	<ul style="list-style-type: none"> • Identifies $\frac{1}{4}$ from a region or set • Identifies $\frac{2}{3}$ or $\frac{3}{3}$ from a region or set • Identifies tenths from a region or set • Identifies eighths from a region or set • Identifies a fraction (denominators other than 2, 3, 4, 8, 10) from a region or set
	<p>RIT 171-180:</p> <ul style="list-style-type: none"> • Identifies the numerical and written name for whole numbers 21 to 100 (e.g., 62 is sixty-two, and vice versa) • Identifies the numeral and written name for whole numbers 101 to 999 (e.g., 342 is three hundred forty-two, and vice versa) • Identifies the numeral and written name for ordinal numbers 1st to 20th (e.g., 1st is first, and vice versa) • Counts numbers 0-100 • Counts numbers 0-1000 • Identifies missing numbers in a series through 100 • Counts by 2's to 100 • Counts and writes by 5's • Counts backwards from a given number (given number greater than 10) • Identifies a whole number that comes between 2 given numbers (20 to 100) • Counts ordinal numbers (first to tenth) • Identifies the ordinal number that comes before, between, or after a given ordinal number (first to tenth) • Represents $\frac{1}{2}$ with a diagram or model
	<p>RIT 161-170:</p> <ul style="list-style-type: none"> • Counts 1 to 10 objects • Counts numbers 0-20 • Identifies missing numbers in a series through 100 • Counts ordinal numbers (1st to 10th)
	<p>RIT Below 161:</p> <ul style="list-style-type: none"> • Counts numbers 0-20

Lesson Title:

Standard/Concept for All:

Introduction: (Get Attention; Connect to Prior Knowledge)

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:

