

## **Numbers and Operations: Fractions & Decimals**

### **Compacted DesCartes**

#### **Adds...**

- 161-180 Money vertically, with no regrouping (\$ dollar sign, . decimal point)
- 181-190 Money with regrouping and decimals to the hundredths place, same number of digits  
Decimals to the hundredths place vertically, not same number of digits  
Decimals to the thousandths place vertically with and without regrouping
- 201-210 Fractions with like denominators, without reducing  
Decimals to the hundredths place vertically, not same number of digits  
Decimals to the thousandths place horizontally, with and without regrouping
- 211-220 Fractions with like denominators, without reducing  
Decimals to the thousandths place horizontally, with and without regrouping
- 221-230 Decimals to the hundredths place horizontally, not same number of digits

#### **Subtracts...**

- 181-190 Decimals to the hundredths place, same number of digits, without regrouping
- 191-210 Fractions with like denominators, without reducing  
Decimals to the hundredths and thousandths place, vertically, same number of digits, with and without regrouping
- 211-220 Decimals to the thousandths place vertically and horizontally, with and without regrouping  
Decimals in the thousandths place vertically, with the zero missing in the ones place
- 221-230 Decimals to the hundredths place (not same number of digits)  
Decimals to the thousandths place horizontally, with and without regrouping

#### **Computation & Problem Solving Using Addition and Subtraction**

- 181-190 Computes 1-step real world problems involving money up to five dollars and converts to decimals
- 191-200 Computes 1p-step real world problems involving money over five dollars and converts to decimals  
Solves real world problems involving decimals (not money)  
Uses models to add and subtract fractions and connect the actions to algorithms
- 201-210 Computes the value of multiple bills and coins and money problems with multiple operations  
Computes multiple step real world problems involving money  
Uses models to add and subtract fractions and connect the actions to algorithms
- 211-220 Computes the value of multiple bills and coins and multi step real world problems involving money  
Analyzes and computes one step real world problems involving money over five dollars

#### **Multiplies...**

- 191-200 Decimals by a whole number
- 201-210 Same as above  
Fraction by a fraction without reducing to simplest form (simple problem)

### **Represent and Identify Decimals**

- 181-190 Applies base ten place value concepts to solve problems
- 191-200 Identifies a decimal on a number line
- 201-210 Identifies the place value and value of each digit to the tenths
- 211-220 Writes a decimal for a shaded region to the tenths place  
Applies base ten place value concepts to solve problems  
Identifies the place value and value of each digit in the tenths
- 221-230 Identifies the numeral and written name for decimals to the hundredths place  
Identifies the place value and value of each digit to the hundredths and thousandths  
Writes a decimal for a shaded region to the hundredths place  
Identifies the numeral and written name for decimals to the thousandths and hundred thousandths place

### **Represent and Identify Fractions**

- 171-180 Identifies one half from a group set
- 181-190 Same as above  
Identifies equal parts by using models  
Identifies fractional parts of a group set  
Writes fractional parts of a group or set, a fraction from a visual representation  
Identifies halves, fourths, and the number of fractional parts shaded in a region
- 191-200 Identifies fractional parts of a group set  
Identifies fourths, thirds, tenths, and eighths  
Writes a fraction from a visual representation  
Uses a number line to identify a fractional point
- 201-210 Identifies halves of a region using non-adjacent parts
- 211-220 Writes a fraction from a nontraditional model  
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)
- 221-230 Uses alternative algorithms to explain the meaning of fraction

### **Compare and Order**

- 171-180 Compares equivalent fraction using visual representations
- 181-190 Orders fractions using visual representations  
Compares and orders decimals to the hundredths place (same number of digits after decimal)
- 191-200 Orders fractions using visual representations  
Compares numerical and visual representations of equivalent fractions  
Compares and orders money in decimal form  
Compares and orders decimals to the thousandths place (same number of digits after decimal)
- 201-210 Compares and orders simple fractions (e.g., common denominator, 1 in the numerator)  
Compares decimals on a number line
- 211-220 Compares fractions greater than or less than a given fraction using visual representations  
Compares fractions on a number line  
Orders decimals on a number line
- 221-230 Orders fractions on a number line  
Compares and orders decimals to the thousandths place, not the same number of digits after decimal
- 231 – 240 Compares and orders decimal and fractional coordinates on a number line

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**Rounds decimals to the nearest...**

201-210	whole number
211-220	tenth and whole number
221-230	hundredths
231-240	thousandths