|  |
| --- |
| **Conceptual Meaning of Addition and Subtraction of Decimals** |
| Recognizes addition and subtraction situations and models concretely or pictorially to add or subtract to hundredths (using hundredths grids or Base Ten Blocks) 25.86 – 17.23  = ?**A graph of a graph with a number of numbers  Description automatically generated** “86 hundredths – 23 hundredths = 63 hundredths 25 – 17 = 8”25.86 – 17.23 = 8.63 | Uses an understanding of place value to add or subtract decimals with hundredths (using standard algorithm) 25.86 − 17.23 = ?**A number with red mark  Description automatically generated**“I used the standard algorithm to subtract the hundredths, then the tenths, and then the whole numbers.” | Models to add or subtract decimals with thousandths (e.g., using thousandths grids or number lines) 43.600 – 1.345 = ?  “600 thousandths – 345 thousandths = 255 thousandths43 – 1 = 42.” 43.6 – 1.345 = 42.255 |
| **Observations/Documentation** |
|  |  |  |

|  |
| --- |
| **Conceptual Meaning of Addition and Subtraction of Decimals (cont’d)** |
| Uses an understanding of place value to add or subtract decimals with thousandths (e.g., using standard algorithm)   A number with red and black numbers  Description automatically generated “I used the standard algorithm to subtract the thousandths, then the hundredths, then the tenths, and then the whole numbers.”  | Uses estimation and mental math strategies to check reasonableness of solutions 43.6 – 1.345 = 42.255 43.6 is close to 44. 1.345 is close to 1.44 – 1 = 43“42.255 is the answer I calculated, and it is close to 43, so my answer is reasonable.”  | Solves addition and subtraction problems flexibly, using a variety of strategiesNaomi swam 1.5 km, rode a bicycle for 35.29 km, and ran for 8.375 km. What wasthe total distance Naomi travelled? 1.5 km + 35.29 km + 8.375 km = ?  A number with red numbers  Description automatically generated“I wrote each number as a decimal with thousandths. Naomi travelled 45.165 km in total.” |
| **Observations/Documentation** |
|  |  |  |

|  |
| --- |
| **Adding and Subtracting Fractions with Like Denominators** |
| Expresses the composition or decomposition of a quantity as a sum or difference<catch: pick up A red and white striped flag  Description automatically generated**“**I can think of as + + + , or as + .I can also think of as − − , or as − .” | Adds and subtracts concretely or pictorially  **+ = ?**“Because each whole is divided into fourths, I can add the parts. 3 fourths + 2 fourths = 5 fourths. 5 fourths make 1 whole and .” + = = 1“I modelled on the number line, then counted on from : 4 fourths, 5 fourths.” | Adds and subtracts symbolically “I converted 3 to , then subtracted. I checked my answer using addition.” | Flexibly solves problems involving the addition and subtraction of fractions “ needs to be added to the other fractions to equal 2.” |
| **Observations/Documentation** |
|  |  |  |   |