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| **Conceptual Meaning of Addition and Subtraction of Decimals** | | |
| Recognizes addition and subtraction situations and models concretely to add or subtract to tenths  0.7 + 0.8 = 1.5    “7 tenths + 8 more tenths = 1 whole and 5 tenths” | Models and symbolizes ways to solve problems by using a number line    1.5 – 0.7 = ? | Uses an understanding of place value to add or subtract decimals with tenths (decomposes both numbers)  14.6 + 27.8 = ?  14 + 27 = 41 (whole numbers)  0.6 + 0.8 = 1.4 (decimals)  41 + 1.4 = 42.4  “I decomposed both numbers,  added the whole numbers, then the tenths.” |
| **Observations/Documentation** | | |
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| **Conceptual Meaning of Addition and Subtraction of Decimals (con’t)** | | |
| Uses an understanding of place value to decompose one number    14.6 + 27.8 = ?  27.8 = 27 + 0.8  14.6 + 27 = 41.6  41.6 + 0.8 = 42.4  “I used place value to  add on the second number.” | Uses estimation and mental math strategies to check reasonableness of solutions  25.86 – 17.23 = 8.63  26 – 17 = 9  “8.63 is the answer I calculated,  and it is close to 9,  so my answer is reasonable.” | Solves addition and subtraction problems flexibly, using a variety of strategies  25.85 – 17.21 = ?  25.85 + 0.15 = 26  17.21 + 0.15 = 17.36  26 – 17.36 = 8.64 |
| **Observations/Documentation** | | |
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| **Relationship Between Repeated Addition of Unit Fractions and Multiplication** | | | |
| Counts unit fractions    “1 one-third, 2 one-thirds,  3 one-thirds” | Concretely solves problems involving the repeated addition of unit fractions  Miranda feeds her puppy, Atlas,  cup of food, 4 times per day.  How much food does the puppy get in two days?    “1 one-third, 2 one-thirds, 3 one-thirds, 4 one-thirds, 5 one-thirds, 6 one-thirds, 7 one-thirds,  8 one-thirds”  cups = 2 cups | Models symbolically and describes repeated addition of unit fractions    + + + + + + + =   = + = 2  “Atlas gets 2 cups  of food per day.” | Uses multiplication of unit fractions to flexibly solve related problems  Atlas is fed 4 times per day  for 2 days: 4 × 2 = 8  8 × = , or 2  “Atlas gets 2 cups of food.” |
| **Observations/Documentation** | | | |
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