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| **Multiplying and Dividing Decimals by 2-Digit Numbers** |
| Models multiplication and division situations concretely and pictorially.1.6 × 3 = ?“I used Base Ten Blocks to make an array with length 3 and width 1.6. I then counted the blocks to get 4.8.I could also use repeated addition:.1.6 + 1.6 + 1.6 = 4.8” | Uses models and other strategies to solve multiplication and division situations.4.15 × 25 = ?4.15 × 25 = (4.0 + 0.10 + 0.05) × (20 + 5)                = (4.0 × 20) + (0.10 × 20) + (0.05 × 20)  + (4.0 × 5) + (0.10 × 5) + (0.05 × 5)                = 80.0 + 2.0 + 1.0 + 20 + 0.5 + 0.25                = 103.75   | Uses the standard algorithm to multiply. 4.15 × 25 = ?“First, I multiplied as if there was no decimal.Next, I counted the number of digits after the decimal point in each factor.Then I placed the same number of digits after the decimal point in the product.”A multiplying numbers on a white background  Description automatically generated |
| **Observations/Documentation** |
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| **Multiplying and Dividing Decimals by 2-Digit Numbers (cont’d)** |
| Decomposes numbers to use partial quotients to divide.4.44 ÷ 12 = ?A number of groups in a row  Description automatically generated with medium confidence“I used partial quotients to divide as whole numbers, then estimated to place the decimal point.4.44 is about 4 and 12 is about 10. So, 4 ÷ 10 = 0.40So, I placed the decimal point so 37 is close to 0.40: 0.37.” | Estimates to determine if answer to multiplication or division problem is reasonable. A number with numbers in a row  Description automatically generated with medium confidence“$4.44 is about $4 and 12 is about 10. So, $4 ÷ 10 = $0.40So, the answer is reasonable.” | Solves multiplication and division problems flexibly using a variety of strategies.The area of a rectangular garden plot is 95.2 m2. The length of the garden is 14 m. What is the width?“I divided as I would whole numbers, then used estimation to place the decimal point.**A number with numbers on it  Description automatically generated with medium confidence**95.2 is about 100, and 14 is about 10.  100 ÷ 10 = 10.I placed the decimal point so that 68 is close to 10: 6.8.The width of the garden is 6.8 m.” |
| **Observations/Documentation** |
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| **Addition and Subtraction of Fractions with Unlike Denominators** |
| Concretely solves problems.   + = ? “I used fraction strips. I can see that = and that + = , or 1.” | Models pictorially to solve problems.   – = ?“I used a double number line. I modelled on the top line and on the bottom line, then found the difference. From the double number lines, I see the difference is .” | Uses equivalent fractions to symbolically solve problems.  + + = ?“I wrote equivalent fractions with a common denominator of 6. = and =  + + = + +  = , or 1 whole.” | Fluently and flexibly solves problems. 3 − 2 = ?“I wrote 2 as an improper fraction, . Then I subtracted − using a common denominator of 8.” − = −  =  |
| **Observations/Documentation** |
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