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| **Content: Calculating Square Roots of Perfect Squares** | | | |
| Determines the square root of fractions or decimals that are perfect squares using a calculator  “I can use the button on a calculator to determine the square root of a number: .” | Determines the square root of whole numbers that are perfect squares using non-calculator strategies (e.g., using mental math)  “I know that 4 × 4 = 16, so the square root of 16 is 4.” | Determines the square root of fractions or decimals that are perfect squares using non-calculator strategies (e.g., using mental math)  “3 × 3 = 9 and 4 × 4 = 16, so the square root of is .” | Solves real-world problems by determining the square roots of rational numbers  “If the area of the field is 31.36 m2, then the side length of the field is the square root of its area.” |
| **Observations/Documentation** | | | |
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| **Competency: Representing** | | | |
| Represents perfect squares of whole numbers  “I can use 16 grid squares to make a square, so 16 is a perfect square.” | Represents a fraction that is a perfect square on a grid  “I can represent by outlining a 10 by 10 grid, then shading 81 grid squares to make a square.” | Represents a fraction on a grid to determine whether it is a perfect square  “For , I can represent the denominator as an 8-by-8 grid, but I can’t represent 47 as a square. So, is not a perfect square.” | Relates fraction models to decimals  “I can think of 0.49 as . I can represent the denominator as a 10-by-10 grid, then shade a 7-by-7 square to represent the numerator, 49. So, and 0.49 are perfect squares.” |
| **Observations/Documentation** | | | |
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