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| **Estimating and Calculating Square Roots** | | | |
| Identifies a perfect square  81 is a perfect square because it can be written as the product of two equal factors:  81 = 9 × 9 81 = −9 × −9 | Identifies the principal square root  of a perfect square  = 12 because 144 = 12 × 12 | Estimates the principal square root of a non-perfect square  For , identify:  = 7 and = 8  55 is closer to 49 than 64,  so estimate √55 as about 7.4. | Uses technology to help estimate the principal square root of a non-perfect square  Use a calculator:  = 13.711 309…  Round to the nearest hundredth: 13.71  Round to the nearest tenth: 13.7 |
| **Observations/Documentation** | | | |
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