Activity 1 Assessment
Estimating and Calculating Square Roots

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Identifies a perfect square	Identifies the principal square root of a perfect square	Estimates the principal square root of a non-perfect square	Uses technology to help estimate the principal square root of a non-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	$\sqrt{144} = 12$ because 144 = 12 × 12	For $\sqrt{55}$, identify: $\sqrt{49} = 7$ and $\sqrt{64} = 8$ 55 is closer to 49 than 64, so estimate $\sqrt{55}$ as about 7.4.	Use a calculator: $\sqrt{188} = 13.711\ 309\ldots$ Round to the nearest hundredth: 13.71 Round to the nearest tenth: 13.7

Observations/Documentation