

Squares and Square Roots

In this tutorial, I'll explore square numbers, perfect squares and square roots.

- Using the values 5 and 8, how would I explain the phrase... *square a number*?
- How would I define a *square number*?
- How could I use my understanding of *area* to model the *square numbers* 25 and 64?

Any whole number that can be represented as the area of a square with a whole number side length is a *perfect square*.

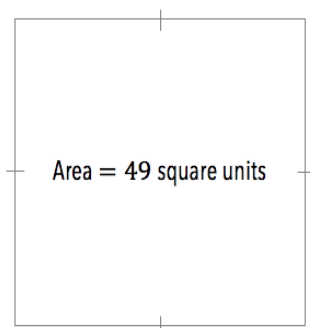
- How would I use my area models from the previous question to explain a *perfect square*?

$2ab + 6k$
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If the area of a square is 49 square units...

- How would I explain my thinking for determining the *side length* of the square?
- How would I compare the *side length* of the square to the *area* of the square?
- How would I explain the *square root* of a number?
- How would I demonstrate calculating the *square root* of 25 and 64 ?



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Which statements do I feel confident explaining and demonstrating?

Which statements do I not feel confident explaining and demonstrating?

- ✓ I can explain how I square a number
- ✓ I can define a square number
- ✓ I can use area to model a square number
- ✓ I can explain and write examples of numbers that are perfect squares
- ✓ I can explain the square root of a number
- ✓ I can demonstrate how I determine the square root of a number