

## Big Idea – Space Reflects Access

Square roots help us find the **side length of a square area**. In real life, this connects to **housing lot sizes**—the land families live on. By comparing the square roots of different lot areas, we can see how **access to affordable housing and space** can differ between communities. Understanding these differences helps us discuss **fairness in housing opportunities** and the importance of equitable access to land and resources.

### Math + Equity Example

An affordable housing program offers square lots of **900 square feet**.

To find the side length of each lot:

$$\sqrt{900} = \mathbf{30 \text{ feet}}$$
 (lot is 30 × 30)

Another community has **1600 square foot lots**:

$$\sqrt{1600} = \mathbf{40 \text{ feet}}$$
 (lot is 40 × 40)

Comparing square roots shows how **lot size differences** can affect space, comfort, and opportunity. When families in one community have larger, more affordable lots, while others face overcrowding or higher costs, **math helps us see how equity and access are connected to land use and housing policy**.

### Data Reflection

Circle or underline the word that stands out to you:

**housing | fairness | access | opportunity | community**

### Share Your Thinking

The word I picked is: \_\_\_\_\_

I picked this word because:

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**Reflection:**

How does this word connect to what we are learning about housing and equity today?

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**Student Equity Reflections**

1. What does this math example show about how lot sizes can differ between communities?

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2. What is the side length of a 900 square foot lot? What about a 1600 square foot lot?

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3. How can differences in lot sizes and affordability affect families and neighborhoods?

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4. What could community leaders or planners do to make access to housing more fair?

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