

Parent Guide to the Standards

# **Understanding Line Segment Dilation**

#### Today's Standard

HSG.SRT.A1b - The dilation of a line segment is longer or shorter in the ratio given by the scale factor.

## Real-World Applications for this Standard

Resizing images while maintaining aspect ratio; Creating scale models in architecture; Map scaling in geography; Adjusting dimensions in computer graphics; Engineering design and prototyping

#### Today I Learned

Today, we learned about how changing the size of a line segment in geometry is called dilation. The size changes, but the shape stays the same.

#### **Common Stumbling Blocks**

Sometimes, students think the shape changes when it's just the size that changes. They might also think the scale only changes one part of the line. But really, it changes the whole line evenly.

## Quiz Me

- What happens to the shape in dilation?
- What does a scale factor do?
- Does dilation change the size or shape?
- Can the scale factor change one part of the line?
- What is an example of dilation?

#### Help Me

Dilation makes things bigger or smaller by the same amount. It's like making a small picture bigger without changing how it looks. You see this when you make a map bigger or smaller to fit your paper.