

Enlargements and Reductions

Terms to Know

- enlargement** - an increase in the dimensions of an object by a constant factor
- can be 2-D or 3-D
- reduction** - a decrease in the dimensions of an object by a constant factor
- can be 2-D or 3-D
- scale factor** - the constant factor by which all dimensions of an object are enlarged or reduced in a scale drawing
- a scale factor greater than 1 indicates an enlargement
 - a scale factor less than 1 indicates a reduction

Examples

- 1) This enlargement is twice the length of the original.



“Twice” means 2 → Scale factor = 2

- 2) This reduction is half the length of the original.



“Half” means $\frac{1}{2}$ → Scale factor = $\frac{1}{2}$

- 3) The dimensions of this rectangle are multiplied by 3 (enlargement).



“Multiplied by 3” means → Scale factor = 3

Next Steps

- 1) Print off the worksheet titled **Intro to Scale Factor Enlarging and Reducing Shapes** (you will need to reference it as you work through the PowerPoint)
- 2) Go through the PowerPoint titled **Using Scale Factor to Draw Figures**
- 3) Send me a picture of your completed worksheet