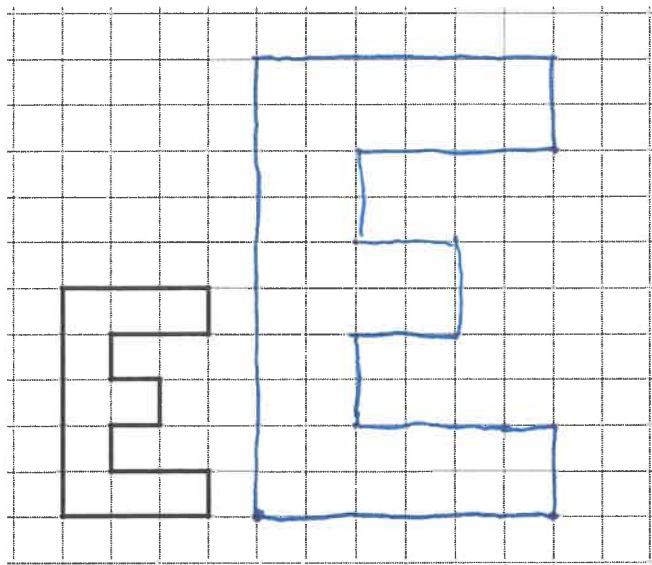


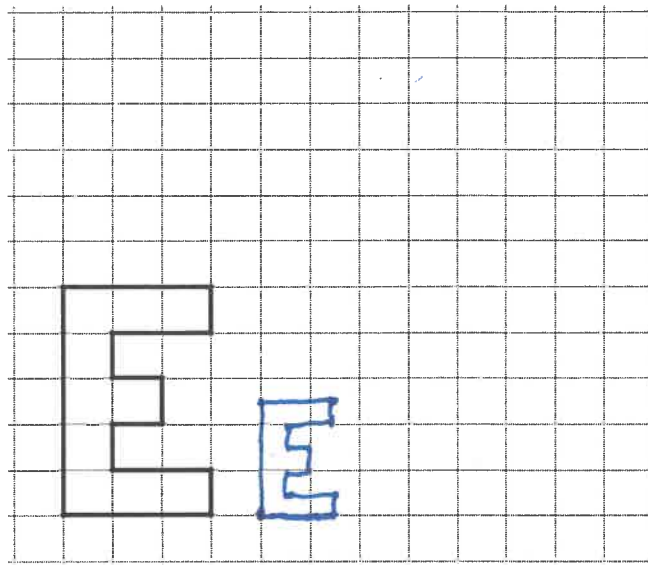
4.1 Enlargements & Reductions

* Enlargements and reductions can be drawn using grid paper or a scale factor.

ex. Make the following letter twice as large:



ex. Make the following letter half as large:

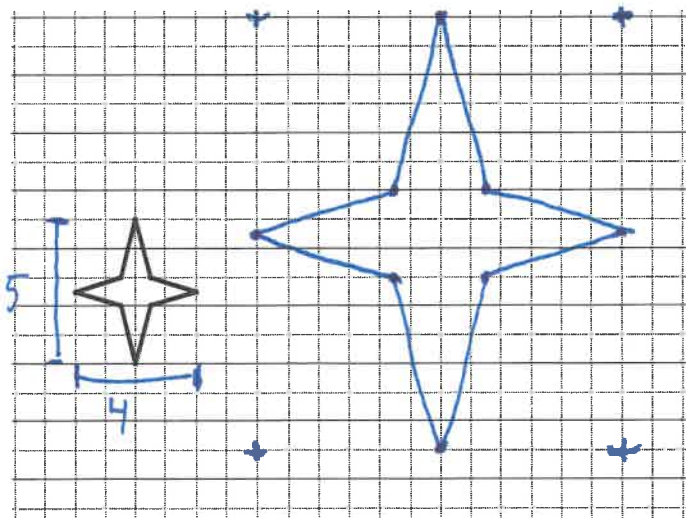


Enlargement: an increase in the dimensions of an object (2D or 3D) by a constant multiplying factor * scale factor greater than 1

Reduction: a decrease in the dimensions of an object (2D or 3D) by a constant multiplying factor * scale factor between 0 and 1

Scale Factor: the constant multiplier by which all dimensions are enlarged or reduced

ex. Draw a picture with dimensions 3 times as large as this original:



*constant/enlargement/reduction/scale factor/smaller/larger

A scale factor greater than 1 indicates a(n) enlargement, which results in an image that is the same shape but proportionally larger than the original.

A scale factor less than 1 indicates a(n) reduction, which results in an image that is the same shape but proportionally smaller than the original.

The scale factor is the constant amount by which all dimensions of an object are enlarged or reduced in a scale drawing.

image: real

drawing of a dime that
is 2x larger than the
real dime

2:1

model car

real is 32x ~~larger~~ ~~smaller~~

image: real

1:32

Practice:

Pg. 50/ #1-5, 7, 10