8.3 – Scale Diagrams

$$Scale \ \ factor = \frac{diagram \ \ measurement}{actual \ \ measurement}$$

scale factor = diagram measurement : actual measurement

Scale factor is between 0 and 1 - the new shape will be a REDUCTION of the original shape.

When the scale is greater than 1, the new shape will be an ENLARGEMENT of the original shape

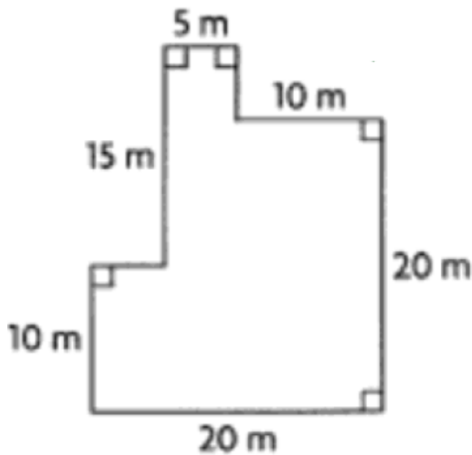Scale factors can be represented in several forms:

Ratio   fraction   decimal   percent

Example 1: Create a scale diagram of the building footprint using the scale *1 m : 1000 m*

Example 2: A cross section of an animal cell is shown as scale diagram. In the diagram, the diameter of the cell is 4.5 cm. The actual cell diameter is 0.15 mm. What scale factor was used to draw the diagram?