Module 1 Vocabulary

Constant of proportionality: When two quantities (such as weight and price) are proportional, you always multiply the first quantity (weight) by the same number to get the second quantity (price). This number is called the constant of proportionality.

Proportional relationships: Relationship in which two quantities—for example, the weight of an item and its price—increase or decrease at the same rate. If one pound of tomatoes sells for four dollars (1:4) and two pounds sell for eight dollars (2:8), the weight and price are proportional; each measure in the second quantity (4 and 8), when divided by its corresponding measure in the first quantity (1 and 2), produces the same number (4), called a constant of proportionality.

Scale drawing: A reduction or an enlargement of an original object or picture in which the dimensions in the drawing are proportional to the corresponding dimensions in the original object or picture.

Scale factor: In a scale drawing, the constant of proportionality is called the scale factor. It can be calculated from the ratio of any length in the scale drawing to the corresponding length in the original. Multiply any dimension in the original by the scale factor to determine its size in the scale drawing. A scale factor greater than one makes the drawing an enlargement; a scale factor smaller than one makes the drawing a reduction.

Unit rate: The numerical part of a rate measurement (e.g., in the rate 45 mph, the unit rate is 45).