Determine whether a proportional relationship exists between two quantities given a graph of ordered pairs. Unit rates are limited to positive values.
Given a linear function in the form $y = mx + b$, identify the slope and y-intercept.
Graph a line representing an additive relationship between two quantities, given the equation in the form $y = x + b$, $b \neq 0$. The y-intercept (b) is limited to integer values and slope is limited to 1.
Write the equation of a line when given the graph of a line.
Make a table of equivalent ratios to represent a proportional relationship between two quantities, when given a practical situation.
Write the equation of a line parallel or perpendicular to a given line through a given point.
Identify, create, describe, and extend patterns using concrete materials, number lines, tables, or pictures.
Determine the slope, m, as rate of change in a proportional relationship between two quantities given a table of values or a verbal description, including those represented in a practical situation, and write an equation in the form $y = mx$ to represent the relationship. Slope will be limited to positive values.
Recognize and describe a line with a slope that is positive, negative, or zero (0).
Determine the slope of the line, given the equation of a linear function.
Write the equation of a vertical line as $x = a$.
Graph a line representing a proportional relationship between two quantities given the equation of the line in the form $y = mx$, where m represents the slope as rate of change. Slope will be limited to positive values.
Write the equation of a linear function in the form $y = mx + b$ given values for the slope, m, and the y-intercept or given a practical situation in which the slope, m, and y-intercept are described verbally.