



Step Functions

A **step function** is a special kind of piecewise function (a function composed of parts of two or more functions). A step function has a graph that is a series of line segments that often looks like a set of steps. Step functions are used to model real-world situations where there are abrupt changes in the output of the function.

The endpoints of the segments on step functions are either open circles (indicating this point is not part of the segment) or filled-in circles (indicating this point is part of the segment).

The graph at right models a situation in which a tour bus company has busses that can each hold up to 20 passengers with 5 available busses.

