Name: _____   Date: _____

3.2 Linear Functions Part 2

Essential Question*: _____

*A solution of a linear equation in two variables is an _____ _____ (x,y) that makes the

equation _____. The graph of a linear equation in two variables is the _____ of _____

(x,y) in a coordinate plane that represents _____ solutions of the _____. Sometimes the

points are _____, and other times the points are _____.

*A _____ domain is a set of input values that consists of only certain numbers in an

_____.

Example:

*A _____ domain is a set of _____ values that consists of _____ numbers in an

interval.

Example:

EXAMPLE 4 **Graphing Discrete Data**

The linear function $y = 15.95x$ represents the cost y (in dollars) of x tickets for a museum. Each customer can buy a maximum of four tickets.

a. Find the domain of the function. Is the domain discrete or continuous? Explain.

b. Graph the function using its domain.
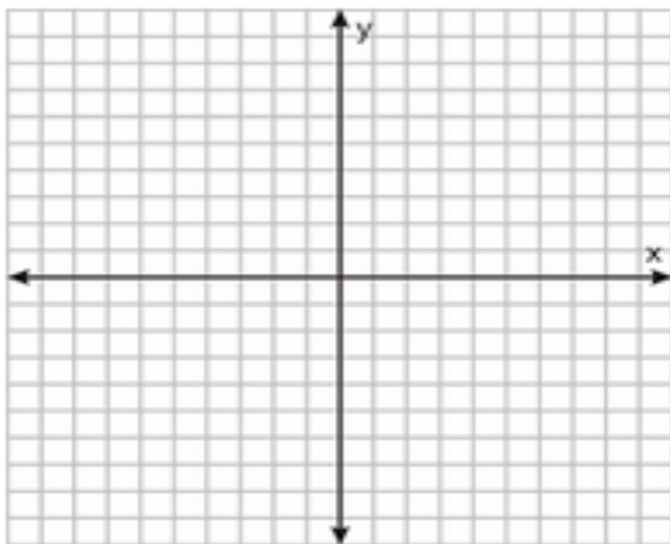
EXAMPLE 5 **Graphing Continuous Data**

A cereal bar contains 130 calories. The number c of calories consumed is a function of the number b of bars eaten.

a. Does this situation represent a linear function? Explain.

b. Find the domain of the function. Is the domain discrete or continuous? Explain.

c. Graph the function using its domain.