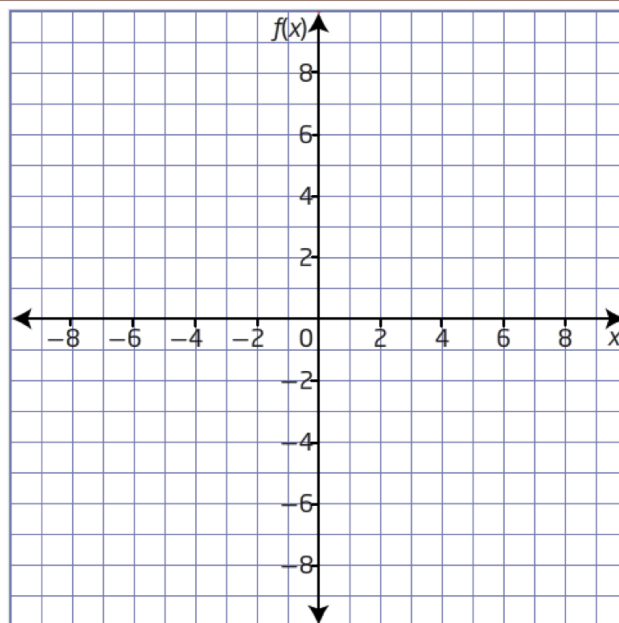## Chapter 3

Quadratic Functions

Pedro has 12 m of fencing available for his yard. He wants to build a rectangular flower bed.

a) Write a quadratic function in standard form to represent the area of the flower bed.

b) On the grid provided, sketch the graph for the function you determined in part a).

c) What are the coordinates of the vertex? What does the vertex represent in this situation?
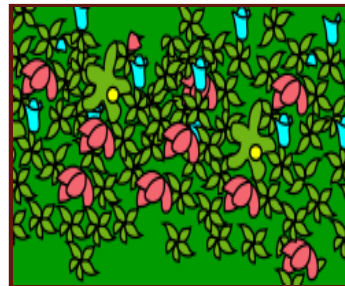
d) Determine the domain and range for this situation.

Answer

Chapter

3

Maximizing the Area of a Garden

Consider the following rectangular garden.

a) Write a function to represent the area of the garden.

b) Without graphing, determine the maximum area of the garden and the value of x that will produce that area.

$(36 - 3x)$ m

$(4x + 12)$ m

Answer

Click here for the Solution