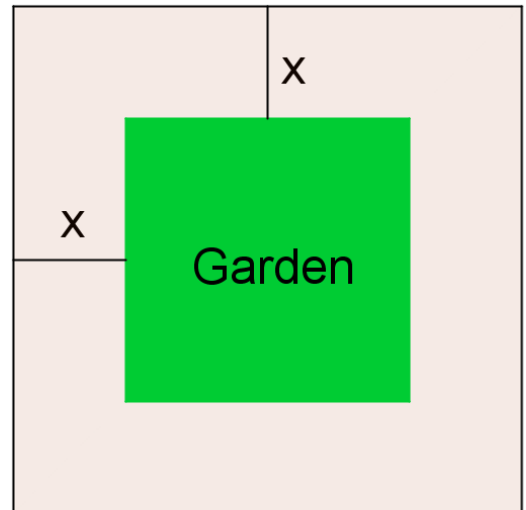


Problem Solving #6  
Geometry Quarter 2

1. A garden that is in the shape of a square, possesses an area of  $400m^2$ . The garden is surrounded by a walkway of constant width. In the diagram the width of the walkway has been labeled as  $x$ . The total area of the walkway has to be  $500 m^2$ . Find the value of  $x$ .



2. A triangle has a perimeter of 50. If 2 of its sides are equal and the third side is 5 more than the equal sides, what is the length of the third side?

3. Flying to Kampala with a tailwind a plane averaged 158 km/h. On the return trip the plane only averaged 112 km/h while flying back into the same wind. Find the speed of the wind and the speed of the plane in still air.

4. Determine the value of  $x$  in the diagram below given that the lines are parallel.

