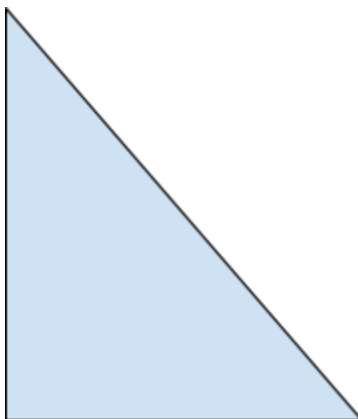


1. Construct (on a separate sheet of paper) a garden in the shape of a right triangle with the two perpendicular sides bordered by a fence. You plan to edge the third side (the hypotenuse) with brick. The dimensions are given in the figure:



2. Use the Pythagorean Theorem to find how many feet of the garden will be edged in brick. Show your calculations next to your garden.
3. Determine the perimeter of the garden.
4. If you use the same amount of fencing and brick for a circular garden, can you tell which shape gives you the maximum area?
5. If you put a fountain inside your garden, what's the maximum radius it could have?