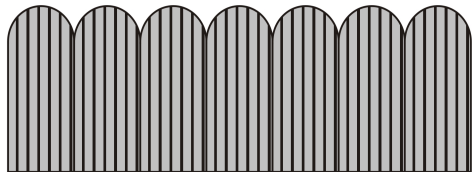


## Problem number 239

Posted Monday October 27<sup>th</sup> 2014

Submit by noon, Monday November 3<sup>rd</sup> 2014



A fence manufacturer wants to make fences with 1 m wide semicircular arches at the top. The frames for the arches are to be cut from sheets of plywood that are 1 m wide. The outside edge of each frame is a semicircle with radius 50 cm. The inside edge is a semicircle with radius 40 cm. (See the diagram). How long must the sheet of plywood be if six arches are to be cut from it?

