

## Problem of the Week

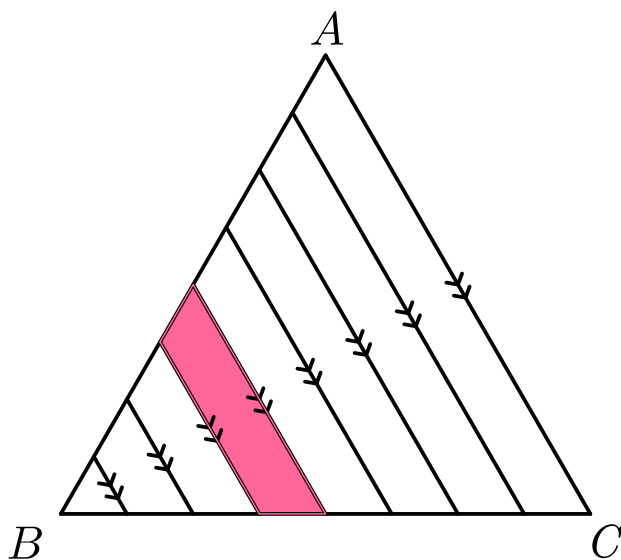
### Problem C

#### Fence Me In

A triangular plot of land, labeled  $ABC$  in the diagram below, has equal side lengths. Each side is 120 m. The larger plot of land is divided into 8 smaller plots of land as follows:

- Sides  $BA$  and  $BC$  are each divided into 8 segments of equal length.
- Each point of division on  $BA$  is connected to its corresponding point of division on  $BC$ , creating 7 line segments.
- Each of the 7 line segments is parallel to the third side of the triangle,  $AC$ , as shown.

Eight plots of land are created by this process. The shaded section is to be surrounded by fence. How much fencing is required?



**STRANDS** GEOMETRY AND SPATIAL SENSE, MEASUREMENT

