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?