Problem of the Week Problem E A Rectangle and a Square

Simeon has a rope that is 108 cm long and is asked to cut the rope once so that one of the pieces can be arranged, with its two ends touching, to form a square, and the other piece can be arranged, with its two ends touching, to form a rectangle with one side length of 6 cm. Furthermore, the area of the square will be equal to the area of the rectangle.

Where should Simeon make the cut to the original piece of rope?

