Problem of the Week Problem D Making the Cut

Four line segments are drawn on a rectangular piece of paper, parallel to the top edge of the paper, as follows:

- Line segment A is 4 cm long and its left end touches the left edge of the paper.
- Line segment B is 3 cm long and its left end is 3 cm from the left edge of the paper.
- Line segment C is 6 cm long and its left end is 1.5 cm from the left edge of the paper.
- Line segment D is 4 cm long and its left end is 1 cm from the left edge of the paper.

The paper can be cut along a dotted line, L, parallel to the left edge of the paper and through each of the four line segments so that the total length of the pieces of the four line segments on each side of the cut is the same.



What is the length, in cm, of the part of line segment A to the left of the cut?