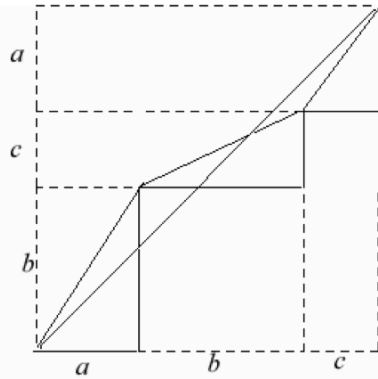


S-15-00034: PWW: An inequality

Your submission is a nice illustration of an inequality for square roots of sums of squares. However, the double inequality for positive numbers a, b, c

$$2(a + b + c) \geq \sqrt{a^2 + b^2} + \sqrt{b^2 + c^2} + \sqrt{c^2 + a^2} \geq \sqrt{2}(a + b + c)$$

was illustrated, with essentially the same figure, in the March-April 2007 issue (#115) of the French journal *Tangente*, p. 10 (the figure below was provided by the teacher of the lycée student who created it):



$$\sqrt{2}(a + b + c) < \sqrt{a^2 + b^2} + \sqrt{b^2 + c^2} + \sqrt{c^2 + a^2} < 2(a + b + c)$$

Hence I cannot recommend your submission for publication in the *College Mathematics Journal*.