## The Pythagorean Theorem

Which of the following statements of the Pythagorean Theorem is most clear? Can you write a clearer version?

I. In right angled trianges the square on the side subtending the right angle is equal to the squares on the sides containing the right angle.<sup>1</sup>

II.  $a^2 + b^2 = c^2$ .

III. The square of the measure of the hypoteneuse of a right triangle is equal to the sum of the squares of the measures of the legs.<sup>2</sup>

IV.  $a^2 + b^2 = c^2$ .



V. In a right triangle, the square of the height plus the square of the base is the square of the hypoteneuse.



VI. The square on the hypoteneuse is the sum of the squares on the other two sides.

<sup>&</sup>lt;sup>1</sup>page 350, <u>Eucid's Elements</u>, edited by Thomas L. Heath, 1908, Dover reprint 1956 <sup>2</sup>page 359, Geometry, Rhoad et al, McDougall, Littell& Company,1984