

Welcome to L<sup>A</sup>T<sub>E</sub>X! L<sup>A</sup>T<sub>E</sub>X excels at typesetting mathematics. For example, the Pythagorean Theorem states that if  $a$  and  $b$  are the lengths of the sides of a right triangle, and  $c$  is the length of that triangle's hypotenuse, then

$$a^2 + b^2 = c^2 \tag{1}$$

From this equation, we can conclude that

$$c = \sqrt{a^2 + b^2}$$

So, for example, if  $a = 3$  and  $b = 4$ , we can calculate that  $c = 5$ .