

$$\sqrt{a} = \frac{1}{\sqrt{a}} \Rightarrow 1 = (\sqrt{a})^2 = a,$$

$$a = 7 - 4\sqrt{3},$$

$$a > 0$$

$$a^2 = 49 - 2 * 16 * 3 + 16 * 3 = 49 - 96 + 48 = 1$$