

sqrt(i)

March 9, 2016

$$\sqrt{z} = \sqrt{re^{i\varphi}} = \sqrt{r}e^{i\varphi/2} = \sqrt{r} \left( \cos \frac{\varphi}{2} + i \sin \frac{\varphi}{2} \right)$$

$$\sqrt{i} = 0.707106781186548 + 0.707106781186548i$$