3 phases in the **i** life span

1) **i** allows us to square root a negative number

i = $\sqrt{-1}$ so $\sqrt{-25} = 5\mathbf{i}$

2) **i** then works like a variable until it is squared

3) when squared it becomes a number $\mathbf{i}^2 = -1$

so, multiplying complex conjugates: $(a+b\mathbf{i})(a-b\mathbf{i}) = a^2 + b^2$

complex conjugates

no more **i**