1-4 Complex Conjugates

Notation for conjugates:

$$z* = \bar{z} = x - iy$$

Note that

$$Re(z) = Re(z*), \;\; Im(z) = -Im(z)$$

Because of this, a complex conjugate (on the plane) is a reflection of the original complex number along the x-axis.

Because of the stated properties of the real and imaginary parts, if z is real, then $z* = z$.