

**Exercise 1**

Verify that

$$(a) \quad (\sqrt{2} - i) - i(1 - \sqrt{2}i) = -2i; \quad (b) \quad (2, -3)(-2, 1) = (-1, 8);$$

$$(c) \quad (3, 1)(3, -1) \left( \frac{1}{5}, \frac{1}{10} \right) = (2, 1).$$