Let two complex numbers be given:

$$z_1 = x_1 + iy_1;$$

$$z_2 = x_2 + iy_2.$$

Then the sum is:

$$z_1 + z_2 = (x_1 + x_2) + i(y_1 + y_2).$$

Division:

$$z_1 = a_1 + ib_1,$$

$$z_2 = a_2 + ib_2,$$

$$\frac{z_1}{z_2} = \frac{a_1 + ib_1}{a_2 + ib_2} =$$

$$= \frac{(a_1 + ib_1)\cdot(a_2 - ib_2)}{(a_2 + ib_2)\cdot(a_2 - ib_2)}$$