

1 Komplexe Zahlen \mathbb{C}

1.1 Arithmetik

$$z_1 + z_2 = (a + bi) + (c + di) = (a + c) + (b + d)i$$

$$z_1 - z_2 = (a + bi) - (c + di) = (a - c) + (b - d)i$$

$$z_1 \cdot z_2 = (a + bi) \cdot (c + di) = (ac - bd) + (ad + bc)i$$

$$\frac{z_1}{z_2} = \frac{a + bi}{c + di} = \frac{ac + bd}{c^2 + d^2} + \frac{bc - ad}{c^2 + d^2}i$$

2 Aufgaben zu Komplexen Zahlen