

## Расчёты в комплексных числах

$$\underline{a} = 3 + j4 \Rightarrow 5 e^{j53^\circ}.$$

$$\underline{b} = 1,2 e^{j67^\circ} \Rightarrow 0,47 + j1,1.$$

$$\begin{aligned} \underline{c} &= \underline{a} \cdot \underline{b} = 5 \cdot 1,2 e^{j(53 + 67)^\circ} = \\ &= 6 e^{j120^\circ} \Rightarrow -3 + j5,2. \end{aligned}$$

$$\underline{d} = 5 - j5 \Rightarrow 7,07 e^{-j45^\circ}.$$

$$\begin{aligned} \underline{f} &= \underline{c} + \underline{d} = (-3 + 5) + j(5,2 - 5) = \\ &= 2 + j0,2 \Rightarrow 2,01 e^{j5,6^\circ}. \end{aligned}$$

$$\begin{aligned} \underline{g} &= \underline{f} / \underline{b} = 2,01 / 1,2 e^{j(5,6 - 67)^\circ} = \\ &= 1,67 e^{-j61,4^\circ} \Rightarrow 0,8 - j1,47. \end{aligned}$$

