

## Расчёты в комплексных числах

$$\underline{a} = 3 + j4 \Rightarrow 5 e^{j53,1^\circ}$$

$$\underline{b} = 1,2 e^{j66,9^\circ} \Rightarrow 0,47 + j1,1$$

$$\underline{c} = \underline{a} \cdot \underline{b} = (3 + j4) \cdot (0,47 + j1,1) = -3 + j5,2 \Rightarrow 6 e^{j120^\circ}$$

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

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

$$\underline{g} = \underline{f} / \underline{b} = (2 + j0,2) / (0,47 + j1,1) = 0,8 - j1,47 \Rightarrow 1,67 e^{-j61,4^\circ}$$

$$\underline{h} = \underline{a} \cdot \underline{d} / (\underline{a} + \underline{d}) = (3 + j4) \cdot (5 - j5) / ((3 + j4) + (5 - j5)) = (35 + j5) / (8 - j1) = 4,23 + j1,15 \Rightarrow 4,39 e^{j15,3^\circ}$$

$$\underline{k} = \underline{a} - \underline{d} = (3 + j4) - (5 - j5) = -2 + j9 \Rightarrow 9,22 e^{j102,5^\circ}$$

