

$$1) \frac{2-i}{3+i} \cdot \frac{3-i}{3-i} = \frac{5-5i}{9+1 \leftarrow \text{EINS}} = \frac{5-5i}{10}$$

$$= \frac{1}{2} - \frac{1}{2}i$$

$$2) 3 \cdot \frac{\frac{4-2i}{1+i}}{\frac{5+3i}{2-i}} = 3 \cdot \frac{4-2i}{1+i} \cdot \frac{2-i}{5+3i} = 6 \cdot \frac{(2-i)^2}{(1+i)(5+3i)}$$

$$= 6 \cdot \frac{3-4i}{2+8i} = 3 \cdot \frac{3-4i}{1+4i} \cdot \frac{1-4i}{1-4i}$$

$$\overset{3}{6} \cdot \frac{(3-4i)}{2(1+4i)} = 3 \cdot \frac{3-4i}{17} = \frac{39}{17} - \frac{48}{17}i$$

$$\frac{3 \cdot [3-4i+16i^2-3 \cdot 4i]}{1^2-(4i)^2}$$

$$1) (1-2i)^3 \cdot [(3-i)(2i+6) \cdot i]$$

$$\rightarrow 1 \cdot 1^3 (2i)^3 - 3 \cdot 1^2 (2i)^2 + 3 \cdot 1^1 (2i)^1 - 1 \cdot 1^0 (2i)^3$$

$$1 - 6i - 12 + 8i$$

$$(-11 + 2i) \cdot 20i$$

$$-220i - 40$$

$$v = \sqrt{220^2 + 40^2}$$

$$\alpha = \arctan \frac{220}{-40} \text{ f. II}$$

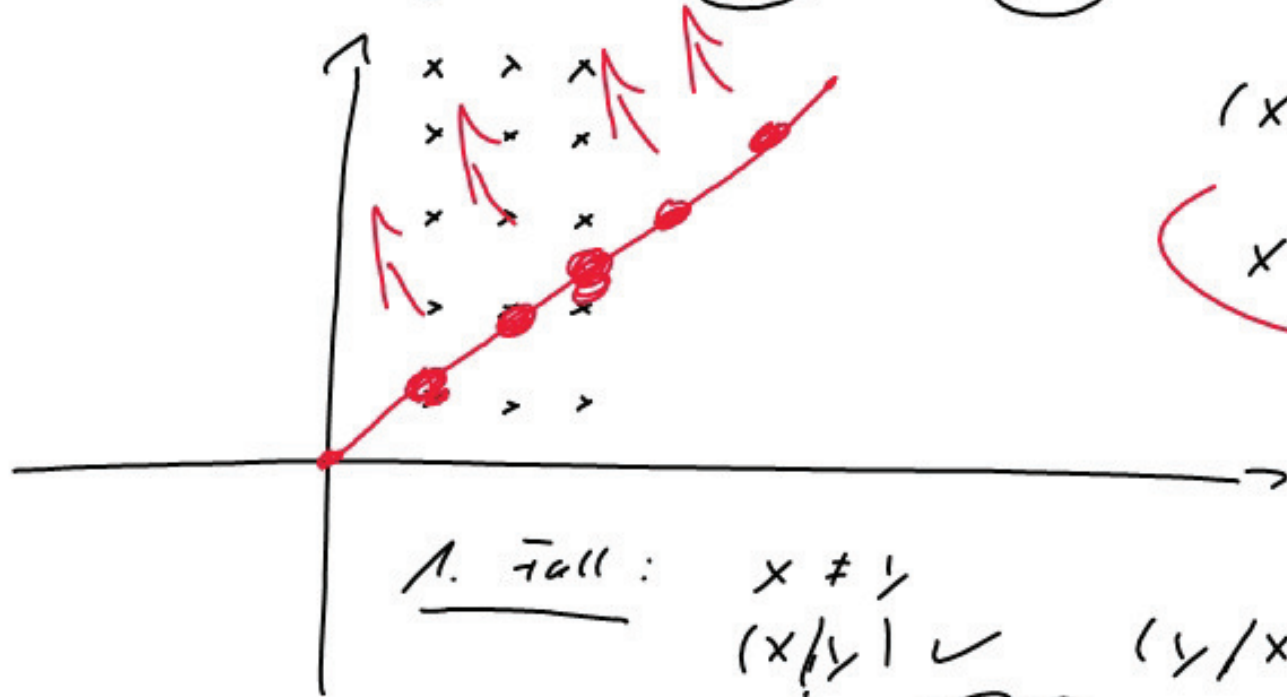
$$\begin{array}{cccc} & & & 1 \\ & & & / \quad \backslash \\ & & 1 & & 1 \\ & & / \quad \backslash & & \\ & 1 & & 2 & & 1 \\ & / \quad \backslash & & / \quad \backslash & & \\ 1 & & 3 & & 3 & & 1 \end{array}$$

$$2) \frac{640}{221} + \frac{704}{221}i = \frac{-64}{-10+11i} \cdot \frac{-10-11i}{-10-11i}$$

$$3) 32 + 126i \rightarrow v = \sqrt{32^2 + 126^2}$$

$$\alpha = \arctan \frac{126}{32}$$

Teilmenge  $\hat{=}$   $(\leq)$  bzw.  $(\geq)$



1. Fall:

$$x \neq y$$

$$(x|y) \checkmark$$

$$(y|x) \not\checkmark$$

Asymmetrie

2. Fall:

$$x = y$$

$$(x|y) \checkmark$$

$$(y|x) \checkmark$$

ANTISYM.