

$$\begin{aligned}
 559 \text{ Nr. 1)} & (2i-5) \cdot [(3i+4) - 2(i-4)] \\
 & (2i-5) \cdot (3i+4-2i+8) \\
 & (2i-5) \cdot (i+12) = 2i^2 + 24i - 5i - 60 \\
 & -62 + 19i \Rightarrow \text{Argument } +\pi
 \end{aligned}$$

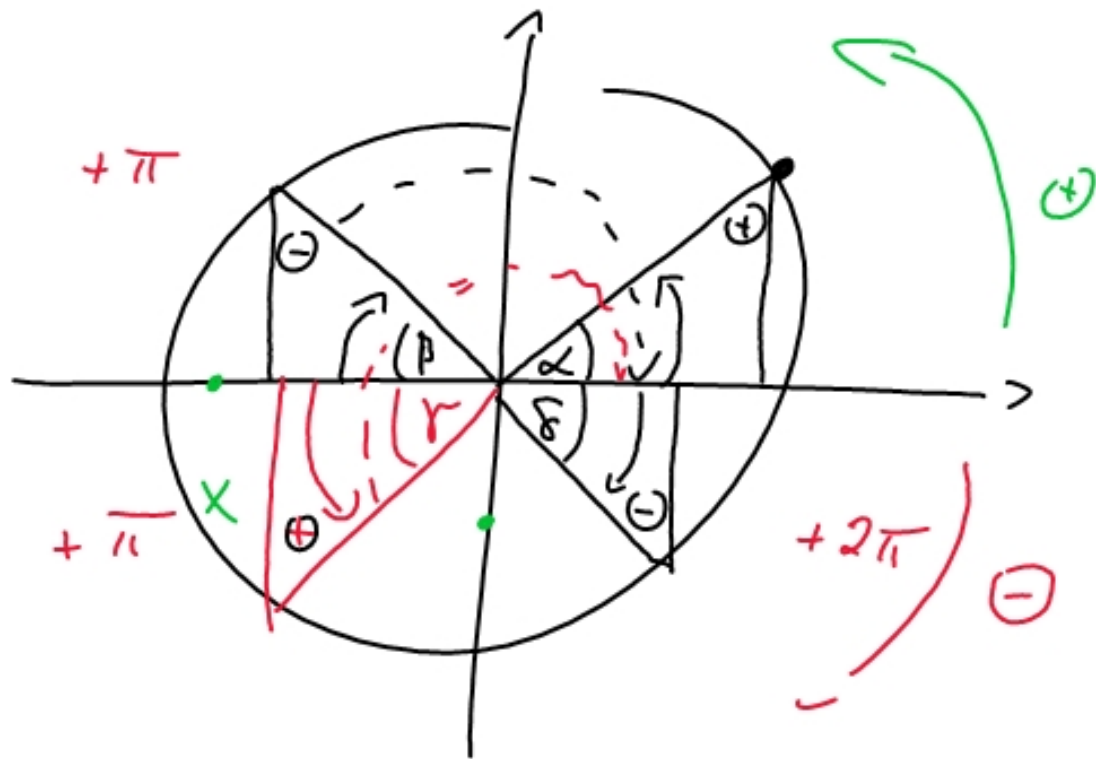
$$\begin{aligned}
 2) & 4 \cdot (i-3)(i+3) - (i-2)(5+i) \\
 & 4 \cdot (i^2 - 9) - (5i + i^2 - 10 - 2i) \\
 & -40 - (3i - 11) = -29 - 3i \quad +\pi
 \end{aligned}$$

$$5) \quad \frac{3-2i}{1-i} \cdot \frac{i+1}{i+1} = \frac{3i+3-2i^2-2i}{i^2-1} = \frac{i+5}{-2} = \frac{-5i-25}{10}$$

$$\frac{3i+4}{1-2i} \cdot \frac{1+2i}{1+2i} = \frac{3i+6i^2+4+8i}{1-4i^2} = \frac{-2+11i}{5} = \frac{-4+22i}{10}$$

$$\Rightarrow \frac{-5i-25}{10} - \frac{-4+22i}{10} - \frac{3i+19}{10} = \frac{-30i-40}{10} = -4-3i$$

$$r = \sqrt{(-4)^2 + (-3)^2} = \sqrt{25} = 5 \quad \alpha = \arctan \frac{3}{4} + \pi$$



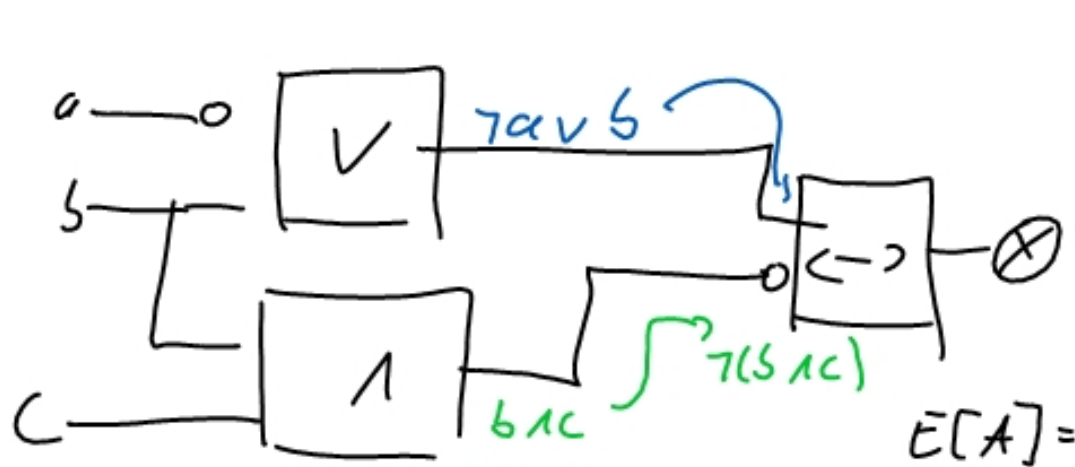
$$\text{Boolean} = \{0, 1\} = \{w, F\} = \{\text{true}, \text{false}\}$$

$$\text{Bool}^2 = \begin{pmatrix} w \\ F \end{pmatrix} \times \begin{pmatrix} w \\ F \end{pmatrix} \Rightarrow \left\{ \begin{pmatrix} w \\ w \end{pmatrix}, \begin{pmatrix} w \\ F \end{pmatrix}, \begin{pmatrix} F \\ w \end{pmatrix}, \begin{pmatrix} F \\ F \end{pmatrix} \right\}$$



;





← - | - →

(7a v b) ↔ 7(b x c)

$2^3 = 8$ E: 4-jahresstufe

$E[A] = \{ (w w \bar{w}), (F w \bar{w}), (F \bar{w} \bar{w}), (F \bar{w} w) \}$

a	w	w	w	w	\bar{w}	\bar{w}	\bar{w}	\bar{w}
b	w	w	\bar{w}	\bar{w}	w	w	\bar{w}	w
c	w	\bar{w}	w	\bar{w}	w	w	w	\bar{w}
$\bar{7}a$	\bar{w}	\bar{w}	\bar{w}	\bar{w}	w	w	w	w
$7a v b$	w	w	\bar{w}	\bar{w}	w	w	w	w
$b x c$	w	\bar{w}	\bar{w}	\bar{w}	w	\bar{w}	\bar{w}	\bar{w}
$7(b x c)$	\bar{w}	w	w	w	\bar{w}	w	w	w
$\bar{7} \leftrightarrow \bar{7}$	\bar{w}	w	\bar{w}	\bar{w}	\bar{w}	w	w	w

$$A(a; s; c) = \underbrace{\neg(a \rightarrow b)}_{\neg(\neg a \vee b)} \dashv \rightarrow \neg a \vee c \quad w \rightarrow F$$

$$\neg(\neg a \vee b) \Rightarrow a \wedge \neg b$$

	a	b	c						
	w	w	w	w	F	F	F	F	F
	w	w	F	F	w	w	F	F	F
	w	F	w	F	w	F	w	w	F
<u>I</u>	$a \rightarrow b$	w	w	F	F	w	w	w	w
	$\neg(a \rightarrow b)$	F	F	w	w	F	F	F	F
	-	-	-	-	-	-	-	-	-
<u>II</u>	$\neg a$	F	F	F	w	w	w	w	w
	$\neg a \vee c$	w	F	w	F	w	w	w	w
	-	-	-	-	-	-	-	-	-
	$\bar{I} \rightarrow \bar{II}$	w	w	w	F	w	w	w	w

$$E[A(a; s; c)] = 300c^3 \setminus E(w F \bar{r})$$