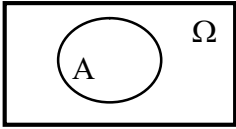
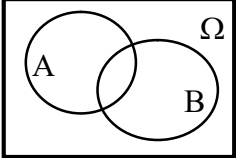
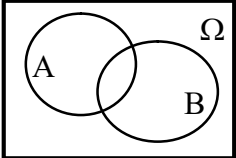
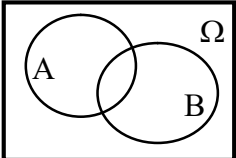
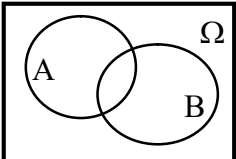
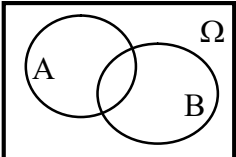
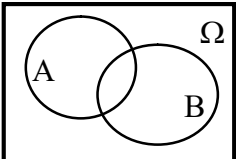


Verknüpfung von Ereignissen

- \cap **Schnittmenge** UND (und gleichzeitig)
- \cup **Vereinigung** ODER (und/oder, mindestens eins davon)
- \setminus **Differenz** NICHT (Ausschluss, ohne)

Ein Ereignis, das nur aus einem Ergebnis besteht, heißt **Elementarereignis** (Beim Würfel ist "4" ein Elementarereignis, "mindestens 4" aber nicht).

Ist $A \cap B = \{ \}$, so heißen A und B **unvereinbar** oder **disjunkt**.

Sprechweise	Mathematischer Term	Venn-Diagramm	Vierfeldertafel												
Gegenergebnis zu A (Nicht A)	\bar{A}		<table style="border-collapse: collapse; margin: auto;"> <tr><td style="padding: 2px 5px;">A</td><td style="border: 1px solid black; width: 40px; height: 20px;"></td></tr> <tr><td style="padding: 2px 5px;">\bar{A}</td><td style="border: 1px solid black; width: 40px; height: 20px;"></td></tr> </table>	A		\bar{A}									
A															
\bar{A}															
Ereignis A und B (Beide Ereignisse)	$A \cap B$		<table style="border-collapse: collapse; margin: auto;"> <tr><td></td><td style="padding: 2px 5px;">B</td><td style="padding: 2px 5px;">\bar{B}</td><td></td></tr> <tr><td style="padding: 2px 5px;">A</td><td style="border: 1px solid black; width: 40px; height: 20px;"></td><td style="border: 1px solid black; width: 40px; height: 20px;"></td><td></td></tr> <tr><td style="padding: 2px 5px;">\bar{A}</td><td style="border: 1px solid black; width: 40px; height: 20px;"></td><td style="border: 1px solid black; width: 40px; height: 20px;"></td><td></td></tr> </table>		B	\bar{B}		A				\bar{A}			
	B	\bar{B}													
A															
\bar{A}															
Ereignis A oder B (Mindestens eines der beiden Ereignisse)	$A \cup B$		<table style="border-collapse: collapse; margin: auto;"> <tr><td></td><td style="padding: 2px 5px;">B</td><td style="padding: 2px 5px;">\bar{B}</td><td></td></tr> <tr><td style="padding: 2px 5px;">A</td><td style="border: 1px solid black; width: 40px; height: 20px;"></td><td style="border: 1px solid black; width: 40px; height: 20px;"></td><td></td></tr> <tr><td style="padding: 2px 5px;">\bar{A}</td><td style="border: 1px solid black; width: 40px; height: 20px;"></td><td style="border: 1px solid black; width: 40px; height: 20px;"></td><td></td></tr> </table>		B	\bar{B}		A				\bar{A}			
	B	\bar{B}													
A															
\bar{A}															
A und nicht B (A ohne B)	$A \cap \bar{B} = A \setminus B$		<table style="border-collapse: collapse; margin: auto;"> <tr><td></td><td style="padding: 2px 5px;">B</td><td style="padding: 2px 5px;">\bar{B}</td><td></td></tr> <tr><td style="padding: 2px 5px;">A</td><td style="border: 1px solid black; width: 40px; height: 20px;"></td><td style="border: 1px solid black; width: 40px; height: 20px;"></td><td></td></tr> <tr><td style="padding: 2px 5px;">\bar{A}</td><td style="border: 1px solid black; width: 40px; height: 20px;"></td><td style="border: 1px solid black; width: 40px; height: 20px;"></td><td></td></tr> </table>		B	\bar{B}		A				\bar{A}			
	B	\bar{B}													
A															
\bar{A}															
Weder A noch B (Keines der beiden)	$\bar{A} \cap \bar{B} = \overline{A \cup B}$		<table style="border-collapse: collapse; margin: auto;"> <tr><td></td><td style="padding: 2px 5px;">B</td><td style="padding: 2px 5px;">\bar{B}</td><td></td></tr> <tr><td style="padding: 2px 5px;">A</td><td style="border: 1px solid black; width: 40px; height: 20px;"></td><td style="border: 1px solid black; width: 40px; height: 20px;"></td><td></td></tr> <tr><td style="padding: 2px 5px;">\bar{A}</td><td style="border: 1px solid black; width: 40px; height: 20px;"></td><td style="border: 1px solid black; width: 40px; height: 20px;"></td><td></td></tr> </table>		B	\bar{B}		A				\bar{A}			
	B	\bar{B}													
A															
\bar{A}															
Nicht beide Ereignisse (höchstens eines der beiden Ereignisse)	$\bar{A} \cup \bar{B} = \overline{A \cap B}$		<table style="border-collapse: collapse; margin: auto;"> <tr><td></td><td style="padding: 2px 5px;">B</td><td style="padding: 2px 5px;">\bar{B}</td><td></td></tr> <tr><td style="padding: 2px 5px;">A</td><td style="border: 1px solid black; width: 40px; height: 20px;"></td><td style="border: 1px solid black; width: 40px; height: 20px;"></td><td></td></tr> <tr><td style="padding: 2px 5px;">\bar{A}</td><td style="border: 1px solid black; width: 40px; height: 20px;"></td><td style="border: 1px solid black; width: 40px; height: 20px;"></td><td></td></tr> </table>		B	\bar{B}		A				\bar{A}			
	B	\bar{B}													
A															
\bar{A}															
Entweder A oder B (genau eines der Ereignisse)	$(A \cup B) \setminus (A \cap B)$ $=$ $(\bar{A} \cap B) \cup (A \cap \bar{B})$		<table style="border-collapse: collapse; margin: auto;"> <tr><td></td><td style="padding: 2px 5px;">B</td><td style="padding: 2px 5px;">\bar{B}</td><td></td></tr> <tr><td style="padding: 2px 5px;">A</td><td style="border: 1px solid black; width: 40px; height: 20px;"></td><td style="border: 1px solid black; width: 40px; height: 20px;"></td><td></td></tr> <tr><td style="padding: 2px 5px;">\bar{A}</td><td style="border: 1px solid black; width: 40px; height: 20px;"></td><td style="border: 1px solid black; width: 40px; height: 20px;"></td><td></td></tr> </table>		B	\bar{B}		A				\bar{A}			
	B	\bar{B}													
A															
\bar{A}															