

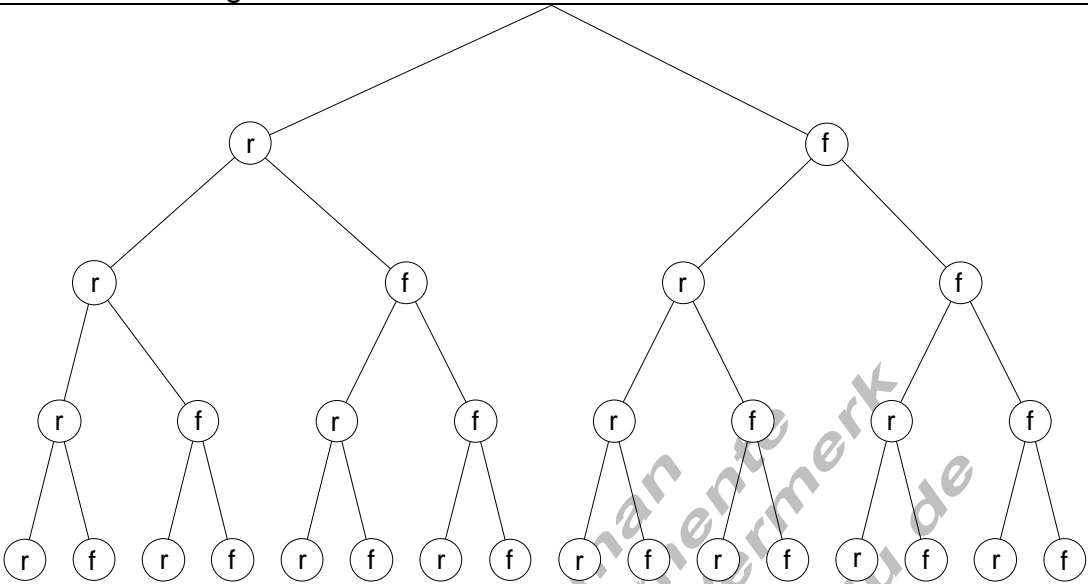
## Lösungen Ereignisse und Verknüpfung von Ereignissen I

### Ausführliche Lösungen:

A1	Ausführliche Lösungen	
	Ergebnismenge: $S = \{1;2;3;4;5;6\}$	
	a) $A = \{4;5;6\}$	b) $B = \{2;4;6\}$
	c) $C = \bar{B} = S \setminus B = \{1;3;5\}$	d) $D = \{1;2;3;5;6\}$

A2	Ausführliche Lösungen	
	$S = \{(1 1);(1 2);(1 3);(1 4);(1 5);(1 6);(2 1);(2 2);(2 3);(2 4);(2 5);(2 6)\}$ $\cup \{(3 1);(3 2);(3 3);(3 4);(3 5);(3 6);(4 1);(4 2);(4 3);(4 4);(4 5);(4 6)\}$ $\cup \{(5 1);(5 2);(5 3);(5 4);(5 5);(5 6);(6 1);(6 2);(6 3);(6 4);(6 5);(6 6)\}$	
	a) $A = \{(1 4);(2 3);(3 2);(4 1)\}$	
	b) $B = \{(2 6);(3 5);(4 4);(4 6);(5 3);(5 5);(6 2);(6 4);(6 6)\}$	
	c) $C = \{(1 1);(1 2);(1 3);(2 1);(2 2);(3 1)\}$	
d) $D = \{(2 5);(5 2)\}$		

A3	Ausführliche Lösungen	
	<p>a)</p>	<p>Ergebnismenge:  <math>S = \{ssr; srs; srr; rss; rsr; rrs; rrr\}</math></p>
	<p>b) <math>A = \{ssr; rrs; rrr\}</math>      <math>B = \{ssr; srr; rss; rrs\}</math>  <math>C = \{ssr; srs; rss\}</math>      <math>D = \{srs; srr; rss; rsr\}</math></p>	
<p>c) <math>S = \{ssr; srs; srr; rss; rsr; rrs; rrr\}</math>  <math>\bar{A} = S \setminus A = \{srs; srr; rss; rsr\}</math>      <math>\bar{B} = S \setminus B = \{srs; rsr; rrr\}</math>  <math>\bar{C} = S \setminus C = \{srr; rsr; rrs; rrr\}</math>      <math>\bar{D} = S \setminus D = \{ssr; rrs; rrr\}</math></p>		

<b>A4</b>	<b>Ausführliche Lösungen</b>
a)	 <p style="text-align: center;"> <math>S = \{rrrr; rrrf; rrrr; rrrf; rrrr; rrrf; rrrr; rrrf; rrrr; rrrf; rrrr; rrrf; rrrr; rrrf; rrrr; rrrf\}</math> </p>
b)	$A = \{rrfr; rrrf; rrrr; rrrf; rrrr; rrrf; rrrr; rrrf\}$ $B = \{rrrr; rrrf; rrrr; rrrf; rrrr\}$ $C = \{rrrf; rrrf; rrrr; rrrf\}$ $D = \{rrrr; rrrf; rrrr; rrrf\}$

<b>A5</b>	<b>Ausführliche Lösungen</b>
a)	$A \cap B = \{1;2\}$ $A \cap C = \{2;4\}$ $B \cup C = \{1;2;4;5;6\}$ .
b)	$\bar{A} = S \setminus A = \{3;5;6\}$ $\overline{A \cap C} = S \setminus (A \cap C) = \{1;3;5;6\}$ $S \setminus B = \bar{B} = \{3;4\}$
c)	A und D sind unvereinbar, wenn gilt: $A \cap D = \emptyset$ Beispiel: $D = \{3;6\} \Rightarrow A \cap D = \emptyset$