

Niklas Vest - A25

9-Felder Tafel mit $\text{COV}(X,Y)=0$ und unabhängig(X,Y).

```
In[ ]:= commonDistr = {{0, 1/4, 0, 1/4}, {1/4, 0, 1/4, 2/4}, {0, 1/4, 0, 1/4}, {1/4, 2/4, 1/4, 1}};
TableForm[commonDistr,
  TableHeadings -> {(* Y *) {"-1", "0", "1", "Σ"}, (* X *) {"0", "1", "2", "Σ"}}]
```

Out[]//TableForm=

	0	1	2	Σ
-1	0	$\frac{1}{4}$	0	$\frac{1}{4}$
0	$\frac{1}{4}$	0	$\frac{1}{4}$	$\frac{1}{2}$
1	0	$\frac{1}{4}$	0	$\frac{1}{4}$
Σ	$\frac{1}{4}$	$\frac{1}{2}$	$\frac{1}{4}$	1

```
In[ ]:= xE = 1 x 2/4 + 2 x 1/4
yE = -1 x 1/4 + 1 x 1/4
xyE = -1 x 1/4 + 1 x 1/4
```

Out[]:= 1

Out[]:= 0

Out[]:= 0

```
In[ ]:= xyCov = xyE - xE x yE
```

Out[]:= 0