

1

$SSS, SSD, SDS, DSS, SDD, DSD, DDS, DDD$

| Y-X | 0 | 1 | 2 | 3 | S |
|-----|---------------|---------------|---------------|---------------|---------------|
| 0 | 0 | $\frac{1}{8}$ | $\frac{1}{8}$ | $\frac{1}{8}$ | $\frac{3}{8}$ |
| 1 | 0 | $\frac{1}{8}$ | $\frac{1}{8}$ | 0 | $\frac{3}{8}$ |
| 2 | $\frac{1}{8}$ | $\frac{1}{8}$ | $\frac{1}{8}$ | 0 | $\frac{3}{8}$ |
| S | $\frac{1}{8}$ | $\frac{1}{8}$ | $\frac{1}{8}$ | $\frac{1}{8}$ | 1 |

Jsou závislé (jinak by nebyla nula u celonulových sloupcích/řádků)

2

| Z-X | 0 | 1 | 2 | 3 | S |
|-----|---------------|---------------|---------------|---------------|---------------|
| 0 | $\frac{1}{8}$ | $\frac{1}{8}$ | $\frac{1}{8}$ | 0 | $\frac{3}{8}$ |
| 1 | 0 | $\frac{1}{8}$ | $\frac{1}{8}$ | 0 | $\frac{2}{8}$ |
| 2 | 0 | $\frac{1}{8}$ | $\frac{1}{8}$ | $\frac{1}{8}$ | $\frac{3}{8}$ |
| S | $\frac{1}{8}$ | $\frac{3}{8}$ | $\frac{3}{8}$ | $\frac{1}{8}$ | 1 |

3

$P[L = 8] = 1$ (konstantní je nezávislá se vším)

4

...

5

$c = 1$

$$f_Y(y) = \int_0^1 (x+y)dx = [x^2/2 + xy]_0^1 = y + 1/2$$

1/2

6

$$f_Y(y) = 1/2 \cdot e^{-y/2}, f_X(x) = e^{-x}$$

$$f_Y \cdot f_X = f \rightarrow \text{nezávislé}$$

???