

S. 101 / Nr 5

Wurf eines Würfels

$P = \text{"Primzahl"}$ $Z = \text{"Ziffer 2"}$ $G = \text{"gerade Ziffer"}$

$$P_P(Z) = \frac{P(P \cap Z)}{P(P)} = \frac{\frac{1}{6}}{\frac{3}{6}} = \frac{1}{3}$$

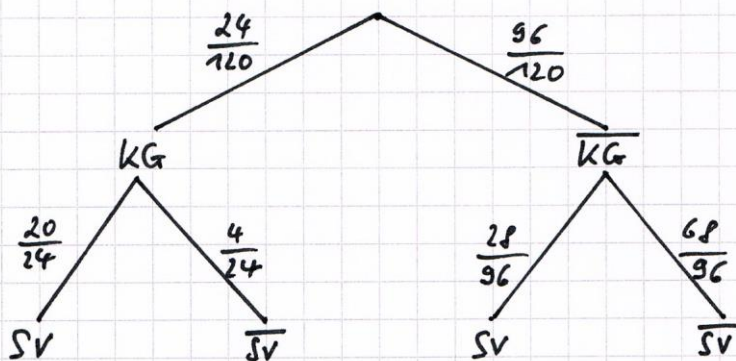
$$P_G(Z) = \frac{P(G \cap Z)}{P(G)} = \frac{\frac{1}{6}}{\frac{3}{6}} = \frac{1}{3}$$

S. 101 / Nr. 7

a)

	KG Kinogänger	kein Kinogänger	
Sportverein	20	28	48
nicht SV	4	68	72
	24	96	120

b,



c, $P(KG) = \frac{24}{120}$

d, $P(K \cap SV) = \frac{24}{120} \cdot \frac{20}{24} = \frac{1}{6}$

e,
$$P_{SV}(KG) = \frac{P(KG \cap SV)}{P(SV)} = \frac{\frac{1}{6}}{\frac{1}{6} + \frac{96}{120} \cdot \frac{28}{96}} = \frac{\frac{1}{6}}{\frac{1}{6} + \frac{7}{30}}$$

$$= \frac{\frac{1}{6}}{\frac{5}{6}} = \frac{1}{5} = \frac{20}{100} = 20\%$$