

STATISTIKA 9.2.2011

1) BIATLONEC ZMAGA, ČE ZADANE VSEH 10 ALI PA 9 TARCŮ.

$$P[\text{ZADANE LEŽE}] = p_1 = 0.9$$

$$P[\text{ZADANE STOJE}] = p_2 = 0.8$$

$$P[10 \text{ ZADETKOV}] = p_1^5 \cdot p_2^5 = 0.1935$$

$$P[9 \text{ ZADETKOV}] = p_1^5 \cdot p_2^4 (1-p_2) \cdot 5 + p_1^4 (1-p_1) p_2^5 \cdot 5 = 0.3494$$

$$P[\text{ZMAGA}] = P[10 \text{ ZADETKOV} \cup 9 \text{ ZADETKOV}] = 0.1935 + 0.3494$$

$$P[\text{ZMAGA}] = \underline{\underline{0.5429}}$$