

IMM - DTU

02405 Probability  
2003-9-18  
BFN/bfn

Question a) By considering a sequence of throws we get

IMM - DTU

02405 Probability  
2003-9-18  
BFN/bfn

Question a) By considering a sequence of throws we get

$$P(1)$$

IMM - DTU

02405 Probability  
2003-9-18  
BFN/bfn

Question a) By considering a sequence of throws we get

$$P(1) = 0$$

IMM - DTU

02405 Probability  
2003-9-18  
BFN/bfn

Question a) By considering a sequence of throws we get

$$P(1) = 0$$

$$P(2)$$

IMM - DTU

02405 Probability  
2003-9-18  
BFN/bfn

Question a) By considering a sequence of throws we get

$$\begin{aligned}P(1) &= 0 \\P(2) &= \frac{1}{6}\end{aligned}$$

IMM - DTU

02405 Probability  
2003-9-18  
BFN/bfn

Question a) By considering a sequence of throws we get

$$P(1) = 0$$

$$P(2) = \frac{1}{6}$$

$$P(3)$$

IMM - DTU

02405 Probability  
2003-9-18  
BFN/bfn

Question a) By considering a sequence of throws we get

$$P(1) = 0$$

$$P(2) = \frac{1}{6}$$

$$P(3) = \frac{5}{6}$$

IMM - DTU

02405 Probability  
2003-9-18  
BFN/bfn

Question a) By considering a sequence of throws we get

$$P(1) = 0$$

$$P(2) = \frac{1}{6}$$

$$P(3) = \frac{5}{6} \frac{2}{6}$$



IMM - DTU

02405 Probability  
2003-9-18  
BFN/bfn

Question a) By considering a sequence of throws we get

$$P(1) = 0$$

$$P(2) = \frac{1}{6}$$

$$P(3) = \frac{5}{6} \frac{2}{6}$$

$$P(4)$$

IMM - DTU

02405 Probability  
2003-9-18  
BFN/bfn

Question a) By considering a sequence of throws we get

$$P(1) = 0$$

$$P(2) = \frac{1}{6}$$

$$P(3) = \frac{5}{6} \frac{2}{6}$$

$$P(4) = \frac{5}{6}$$

IMM - DTU

02405 Probability  
2003-9-18  
BFN/bfn

Question a) By considering a sequence of throws we get

$$P(1) = 0$$

$$P(2) = \frac{1}{6}$$

$$P(3) = \frac{5}{6} \frac{2}{6}$$

$$P(4) = \frac{5}{6} \frac{4}{6}$$

IMM - DTU

02405 Probability  
2003-9-18  
BFN/bfn

Question a) By considering a sequence of throws we get

$$P(1) = 0$$

$$P(2) = \frac{1}{6}$$

$$P(3) = \frac{5}{6} \frac{2}{6}$$

$$P(4) = \frac{5}{6} \frac{4}{6} \frac{3}{6}$$

IMM - DTU

02405 Probability  
2003-9-18  
BFN/bfn

Question a) By considering a sequence of throws we get

$$\begin{aligned}P(1) &= 0 \\P(2) &= \frac{1}{6} \\P(3) &= \frac{5 \cdot 2}{6 \cdot 6} \\P(4) &= \frac{5 \cdot 4 \cdot 3}{6 \cdot 6 \cdot 6} \\P(5) &= \frac{5 \cdot 4 \cdot 3 \cdot 4}{6 \cdot 6 \cdot 6 \cdot 6} \\P(6) &= \frac{5 \cdot 4 \cdot 3 \cdot 2 \cdot 5}{6 \cdot 6 \cdot 6 \cdot 6 \cdot 6} \\P(7) &= \frac{5 \cdot 4 \cdot 3 \cdot 2 \cdot 1}{6 \cdot 6 \cdot 6 \cdot 6 \cdot 6}\end{aligned}$$

IMM - DTU

02405 Probability  
2003-9-18  
BFN/bfn

Question a) By considering a sequence of throws we get

$$\begin{aligned}P(1) &= 0 \\P(2) &= \frac{1}{6} \\P(3) &= \frac{5 \cdot 2}{6 \cdot 6} \\P(4) &= \frac{5 \cdot 4 \cdot 3}{6 \cdot 6 \cdot 6} \\P(5) &= \frac{5 \cdot 4 \cdot 3 \cdot 4}{6 \cdot 6 \cdot 6 \cdot 6} \\P(6) &= \frac{5 \cdot 4 \cdot 3 \cdot 2 \cdot 5}{6 \cdot 6 \cdot 6 \cdot 6 \cdot 6} \\P(7) &= \frac{5 \cdot 4 \cdot 3 \cdot 2 \cdot 1}{6 \cdot 6 \cdot 6 \cdot 6 \cdot 6}\end{aligned}$$

Question b) The sum of the probabilities  $p_2$  to  $p_6$  must be

IMM - DTU

02405 Probability  
2003-9-18  
BFN/bfn

Question a) By considering a sequence of throws we get

$$\begin{aligned}P(1) &= 0 \\P(2) &= \frac{1}{6} \\P(3) &= \frac{5 \cdot 2}{6 \cdot 6} \\P(4) &= \frac{5 \cdot 4 \cdot 3}{6 \cdot 6 \cdot 6} \\P(5) &= \frac{5 \cdot 4 \cdot 3 \cdot 4}{6 \cdot 6 \cdot 6 \cdot 6} \\P(6) &= \frac{5 \cdot 4 \cdot 3 \cdot 2 \cdot 5}{6 \cdot 6 \cdot 6 \cdot 6 \cdot 6} \\P(7) &= \frac{5 \cdot 4 \cdot 3 \cdot 2 \cdot 1}{6 \cdot 6 \cdot 6 \cdot 6 \cdot 6}\end{aligned}$$

Question b) The sum of the probabilities  $p_2$  to  $p_6$  must be one,

IMM - DTU

02405 Probability  
2003-9-18  
BFN/bfn

Question a) By considering a sequence of throws we get

$$\begin{aligned}P(1) &= 0 \\P(2) &= \frac{1}{6} \\P(3) &= \frac{5 \cdot 2}{6 \cdot 6} \\P(4) &= \frac{5 \cdot 4 \cdot 3}{6 \cdot 6 \cdot 6} \\P(5) &= \frac{5 \cdot 4 \cdot 3 \cdot 4}{6 \cdot 6 \cdot 6 \cdot 6} \\P(6) &= \frac{5 \cdot 4 \cdot 3 \cdot 2 \cdot 5}{6 \cdot 6 \cdot 6 \cdot 6 \cdot 6} \\P(7) &= \frac{5 \cdot 4 \cdot 3 \cdot 2 \cdot 1}{6 \cdot 6 \cdot 6 \cdot 6 \cdot 6}\end{aligned}$$

Question b) The sum of the probabilities  $p_2$  to  $p_6$  must be one, thus the sum in question is 1.



IMM - DTU

02405 Probability  
2003-9-18  
BFN/bfn

Question a) By considering a sequence of throws we get

$$\begin{aligned}P(1) &= 0 \\P(2) &= \frac{1}{6} \\P(3) &= \frac{5 \cdot 2}{6 \cdot 6} \\P(4) &= \frac{5 \cdot 4 \cdot 3}{6 \cdot 6 \cdot 6} \\P(5) &= \frac{5 \cdot 4 \cdot 3 \cdot 4}{6 \cdot 6 \cdot 6 \cdot 6} \\P(6) &= \frac{5 \cdot 4 \cdot 3 \cdot 2 \cdot 5}{6 \cdot 6 \cdot 6 \cdot 6 \cdot 6} \\P(7) &= \frac{5 \cdot 4 \cdot 3 \cdot 2 \cdot 1}{6 \cdot 6 \cdot 6 \cdot 6 \cdot 6}\end{aligned}$$

Question b) The sum of the probabilities  $p_2$  to  $p_6$  must be one, thus the sum in question is 1.

Question c) Can be seen immediately.