

Matemática 3 - Resultados

Práctica 1

1. a) $S = \{(1,1),(1,2),(1,3),(1,4),(1,5),(1,6),(2,1),(2,2),(2,3),(2,4),(2,5),(2,6),(3,1),(3,2),(3,3),(3,4),(3,5),(3,6),(4,1),(4,2),(4,3),(4,4),(4,5),(4,6),(5,1),(5,2),(5,3),(5,4),(5,5),(5,6),(6,1),(6,2),(6,3),(6,4),(6,5),(6,6)\}$
b) $S = \{(x,y) / 1 \leq x \leq 6, 1 \leq y \leq 6, x \in \mathbb{N}, y \in \mathbb{N}\}$
2. $S = \{1CC, 1CS, 1SC, 1SS, 2C, 2S, 3CC, 3CS, 3SC, 3SS, 4C, 4S, 5CC, 5CS, 5SC, 5SS, 6C, 6S\}$
3. a) $S_1 = \{FFFF, FFFM, FFMF, FFMM, FMFF, FMFM, FMNF, FMMM, MFFF, MFFM, MFMF, MFMM, MMFF, MMFM, MMMF, MMMM\}$ *si se considera con orden*
 $S_1 = \{ \{FFFF\}, \{FFFM\}, \{FFMM\}, \{FMFF\}, \{FMFM\}, \{FMNF\}, \{FMMM\}, \{MFFF\}, \{MFFM\}, \{MFMF\}, \{MFMM\}, \{MMFF\}, \{MMFM\}, \{MMMF\}, \{MMMM\} \}$ *si se considera sin orden*
b) $S_2 = \{0, 1, 2, 3, 4\}$
4. $A = \{(3,6),(4,5),(4,6),(5,4),(5,5),(5,6),(6,3),(6,4),(6,5),(6,6)\}$
 $B = \{(2,1),(2,2),(2,3),(2,4),(2,5),(2,6),(1,2),(3,2),(4,2),(5,2),(6,2)\}$
 $C = \{(5,1),(5,2),(5,3),(5,4),(5,5),(5,6),(6,1),(6,2),(6,3),(6,4),(6,5),(6,6)\}$
 $A \cap C = \{(5,4),(5,5),(5,6),(6,3),(6,4),(6,5),(6,6)\}$
 $A \cap B = \emptyset$
 $B \cap C = \{(5,2),(6,2)\}$
5. $A = \{1CC, 1CS, 1SC, 1SS, 2C, 2S\}$
 $B = \{1SS, 3SS, 5SS\}$
 $A^c = \{3CC, 3CS, 3SC, 3SS, 4C, 4S, 5CC, 5CS, 5SC, 5SS, 6C, 6S\}$
 $A^c \cap B = \{3SS, 5SS\}$
 $A \cup B = \{1CC, 1CS, 1SC, 1SS, 2C, 2S, 3SS, 5SS\}$
6. a) $\frac{10}{36}$ b) $\frac{11}{36}$ c) $\frac{1}{3}$ d) $\frac{7}{36}$
7. a) $\frac{1}{3}$ b) $\frac{5}{14}$
8. a) $S = \{1,2,3,4\}$ b) $\frac{1}{2}$ c₁) No, $S = \{1,2,3,4\}$ c₂) Si, $\frac{5}{9}$
9. $\frac{6.5^2}{6^5} = 0,0193$
10. a) $\frac{1}{5}$ b) $\frac{1}{10}$
11. a) $\frac{1}{15}$ b) $\frac{1}{3}$
12. a) 0,32 b) 0,68
13. a) 0,58 b) 0,96 c₁) 0,80 c₂) 0,45 c₃) 0,55
14. $P(A) = \frac{1}{3}$ $P(B) = \frac{2}{3}$ $P(A \cap B^c) = \frac{1}{12}$
15. 0,5969