

Resumen de soluciones tareauoparteuno

1
trivial

2 De examen

- i) 6x6x6
- ii) 16; 3,4,...,18
- iii) 6; 1,2,...,6

3

A

4

a) $12!/(12)^{12}$

b) $\binom{12}{2} \frac{2^6}{12^6}$

5 De examen

Let A_i be the event that couple i sit next to each other. Then

$$P(\cup_{i=1}^4 A_i) = 4 \frac{2 \cdot 7!}{8!} - 6 \frac{2^2 \cdot 6!}{8!} + 4 \frac{2^3 \cdot 5!}{8!} - \frac{2^4 \cdot 4!}{8!}$$

and the desired probability is 1 minus the preceding.

6 De examen

(a) EF^cG^c

(b) EF^cG

(c) $E \cup F \cup G$

(d) $EF \cup EG \cup FG$

(e) EFG

(f) $E^cF^cG^c$

(g) $E^cF^cG^c \cup EF^cG^c \cup E^cFG^c \cup E^cF^cG$

(h) $(EFG)^c$

(i) $EFG^c \cup EF^cG \cup E^cFG$

(j) S

7

$P(E)=P(F)=P(G)=1/3$

a) $1/3$

b) 0

c) 1

d) 0

e) 0

f) 0

g) 1

h) 1

i) 0

j) 1