

1) A, L, N, S, U

$$5! = 120$$

$$2) {}_{13}C_2 \cdot {}_4C_2 \cdot {}_4C_2 \cdot 44$$

$$= \frac{13!}{2! \cdot 11!} \cdot \frac{4!}{2! \cdot 2!} \cdot \frac{4!}{2! \cdot 2!} \cdot 44 = 78 \cdot 6 \cdot 6 \cdot 44$$

$$= 123,552$$

3) songs: 16

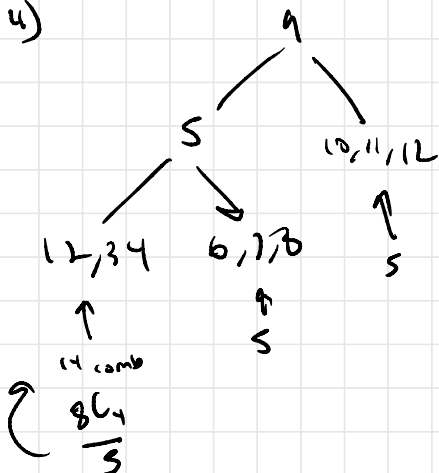
couples: 7

$${}_{16}C_1 \cdot {}_{15}C_5$$

$$= 16 \cdot 5005$$

$$= 80,080$$

4)



$$14 \cdot 5 \cdot 5 = 350$$

5) 10 friends

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9 grps

$$9C_3 + 9C_4$$

$$= 210$$