

Akshar
SinghLab 3Q3

$$P(\text{at least 1 b'day match}) = 1 - P(\text{no b'day match})$$
$$= 1 - \frac{365 \cdot 364 \cdot \dots \cdot (365 - k + 1)}{365^k}$$

for ~~n~~ $k = 50$ $P \approx 0.97$