Therefore, if we consider $m \geq \frac{1}{2}\left(1+\sqrt{1-8n\ln\delta}\right)$ people, where $\delta$ is a real number in the range $0 < \delta \leq 1$, then the probability $p_{uni}$ that at least two of them have a common birthday satisfies $p_{uni} \geq 1-\delta$. For example, when $n = 365$, we have

| $m$ | 23 | 42 | 59 | 72 |
|---|---|---|---|---|
| $p_{uni}$ | 0.5 | 0.9 | 0.99 | 0.999 |