

Score	-1	0	1
Probability	1/3	1/3	1/3

Let X be the score in one round.

Average score : $\mathbb{E}(X) = \frac{1}{3}(-1 + 0 + 1) = 0$

Variance : $\sigma^2(X) = \frac{1}{3}(-1 - 0)^2 + \frac{1}{3}(0 - 0)^2 + \frac{1}{3}(1 - 0)^2 = \frac{2}{3}$

Repeating independently n rounds :

$$\sigma^2\left(\sum_{i=1}^n X_i\right) = \sum_{i=1}^n \sigma^2(X_i) = \frac{2n}{3}$$

Standard deviation after n rounds : $\sigma = \sqrt{\frac{2n}{3}}$

With $n = 1000$:

$$\sigma = \sqrt{\frac{2 \times 1000}{3}} \approx \mathbf{25.8}$$