The binomial distribution converges towards the [Poisson distribution](http://en.wikipedia.org/wiki/Poisson_distribution) as the number of trials goes to infinity while the product *np* remains fixed. Therefore the Poisson distribution with parameter λ = *np* can be used as an approximation to B(*n*, *p*) of the binomial distribution if n is sufficiently large and p is sufficiently small. According to two rules of thumb, this approximation is good if *n* ≥ 20 and *p* ≤ 0.05, or if *n* ≥ 100 and *np* ≤ 10