

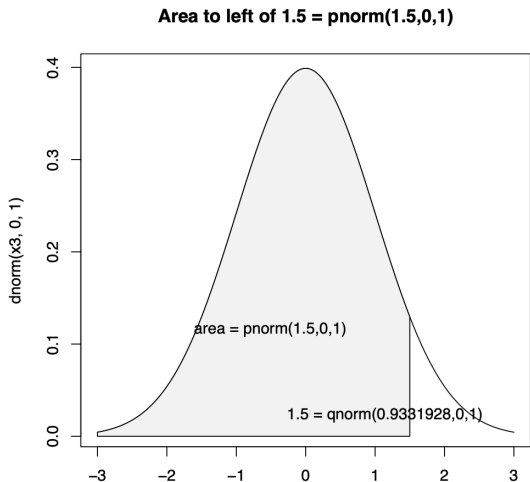
MATH 205: Statistical methods

Lab 6: Central limit theorem

Goals: Generate random data

- built-in distributions
- central limit theorem

Normal distribution: rnorm, dnorm, pnorm, qnorm



Problem

Let $X \sim \mathcal{N}(3, 9)$.

- Compute $P[3.5 \leq X \leq 5.25]$.
- Find a such that

$$P[X \leq a] = 0.95$$

Some built-in distributions

- The Binomial Probability Distribution
- The Geometric Distribution
- The Poisson Distribution
- The Beta Distribution
- The Gamma Distribution
- The Exponential Distribution