

Today's lesson

- Probability calculations with the standard normal distribution.
- Making predictions based on the specification of a normal distribution.

Chapter Ten: The Normal Distribution

- Definition of Normal Distribution
- Using tables of the standard normal distribution.
- Solving basic problems with the standard normal distribution.
- Central limit theorem for sums and averages

Definition of the normal distribution

- Familiar bell-shaped curve
- Continuous distribution, unimodal, symmetric, rapid fall-off of probability for values far from mean.
- Probability density function, $\varphi(z)$
- Cumulative distribution function, $\Phi(z)$