Exam 4 Review

Note: This is not a complete list of topics – you should study your lecture notes and homework in addition to reviewing the items listed here.

1. normal curve



- 2. areas under the standard normal curve
 - a. area to the left = value from table II



b. area to the right = 1 - (area to the left)



c. area between = (area left of Z_2) – (area left of Z_1)



- 3. $Z_{\alpha} \alpha$ area to the <u>right</u>
- 4. finding normal probabilities
 - a. convert to z-scores using $Z = \frac{X \mu}{\sigma}$
 - b. find the area under the standard normal curve
- 5. assessing normality normal probability plots
 - should be approximately linear, with more variability allowed at the ends
- 6. sampling error- the error inherent in using a sample to estimate something about the population
- 7. the sampling distribution of the sample mean

a.
$$\mu_{\overline{x}} = \mu$$

b.
$$\sigma_{\bar{x}} = \frac{\sigma}{\sqrt{n}}$$