## Math 262 Reading Guide

Section 3.4.2

Read Section 3.4.2 and answer the following questions. Hand in this worksheet at the next class.

1. What is the definition of the gamma function?

2. What is the definition of the **gamma distribution**?

3. In what way is the exponential distribution a special case of the gamma distribution?

4. If X is has a gamma distribution with parameters  $\alpha$  and  $\beta$ , what are the mean and variance of X?

5. What is the mgf of the gamma distribution?