## 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?