

# STAT 3250 - Fundamentals Of Probability

## Quiz 10

**Name:**-----

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**Date:** 11/11/2021

1. Using integration, evaluate:  $\int_0^{0.4} \frac{\Gamma(7)}{\Gamma(4)\Gamma(3)} y^3 (1-y)^2 dy$

2. Let  $Y = X^2$  find the pdf of  $Y$  when the distribution of  $X$  is  $N(0, 1)$