

MATH 3330 Assignment 1

q1

1. $z \sim N(0, 1)$

$$z_{0.4} = -0.2533$$

$$z_{0.45} = 1.6449$$

(5)
2. $t_{0.4} = -0.2672$

$$t_{0.4}^{(10)} = -0.2602$$

$$t_{0.4}^{(40)} = -0.2550$$

$$t_{0.4}^{(120)} = -0.2539$$

As the degrees of freedom approach infinity, the t -critical values become closer to $z \sim N(0, 1)$ for $z_{0.4}$.

3. $F_{0.05}^{(2, 4)} = 6.9443$

$$F_{0.01}^{(1, 6)} = 13.7450$$