

Department of Mathematics and Statistics  
Semester 121

STAT211

Quiz 6

Wednesday November 28, 2012

Name: \_\_\_\_\_

ID #: \_\_\_\_\_

1. If  $Z$  is a standard normal, find

a.  $P(Z > -1.28)$

b.  $P(Z < 0.87)$

2. If  $X$  is a normal random variable with mean 4 and standard deviation 3. Find

a.  $P(|X| > 1)$

b.  $P(-2 < X < 8.5)$

c. The 80<sup>th</sup> percentile of  $X$ .

d.  $x$  such that  $P(X > x) = 0.367$