Math 122
Introduction to Statistics and Probability
Uniform and Standard Normal Practice
Round to four decimal places as necessary.

1. The values of a random variable x are uniformly distributed between 7 and 19.

   (a) Find $P(10 < x < 13)$

   (b) Find a so that $P(x < a) = 0.975$

2. Assume that the random variable z has a standard normal distriubution.

   (a) Find $P(z < 1.23)$

   (b) Find $P(z > 2.34)$

   (c) Find $P(-0.12 < x < 3.45)$

   (d) Find a so that $P(x < a) = 0.60$.

   (e) Find a so that $P(x > a) = 0.70$

   (f) Find a so that $P(-a < x < a) = 0.70$