1. The medical records of infants at a hospital show that the infants birth weight are normally distributed with a mean of 7.4 pounds and a standard deviation of 1.2 pounds. Find the probability that an infant selected at random from among those delivered at the hospital

   (a) weighed more than 9.2 pounds at birth.

       normalcdf(9.2, 1e99, 7.4, 1.2) = 0.0668

   (b) weighed exactly 8.5 pounds at birth.

       zero, since the random variable is continuous.

   (c) weighed between 6 and 9 pounds at birth.

       normalcdf(6, 9, 7.4, 1.2) = 0.7871

2. Let X be a normally distributed random variable with mean of 45 and standard deviation of 7.

   (a) Find the value of A such that $P(X < A) = .6$

       A = invnorm(.6, 45, 7) = 46.7734

   (b) Find the value of B such that $P(X > B) = .8$

       B = invnorm(1 − .8, 45, 7) = 39.1087