3. Assume that bicep girth (the distance around the bicep) in the human population is normally distributed with mean 31 cm and standard deviation 4 cm.

In the following questions, give your answer to two decimal places (e.g., 35.23%).

(a) A person has bicep girth 22 centimeters. What percentile does this correspond to?

(b) What percentage of people have bicep girth between 31 and 35 cm?

(c) What percentage of people have bicep girth bigger than 35 cm?

(d) Wilmer’s goal is to work out until his bicep is bigger than 95% of the population’s. How big would it need to be for this to be true?