Determine the following standard normal (z) curve areas:

a. The area under the z curve to the left of 1.75

b. The area under the z curve to the right of 1.20

c. The area under the z cuve between -1 and 1

Determine the value z that:

a. Separates the largest 3% of all values from the others

b. Separates the smallest 10% of all values from the others

c. Separates the middle 98% of all z values from the most extreme 2%

Most babies are born in the "normal" range of 37-43 weeks. When the babies are born, they have a normal distribution with population mean of 3500 grams, and a population standard deviation of 600 grams. (1 lb = 453.59 grams)

a. What is the probability that the birth weight of a randomly selected full-term baby exceeds 4000 grams?

b. What is the probability that the birth weight of a randomly selected full-term baby is either less than 2000 grams or greater than 5000 grams?

c. How would you characterize the most extreme 0.1% of all full-term baby weights?