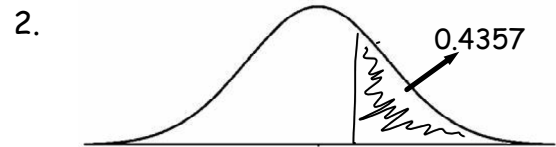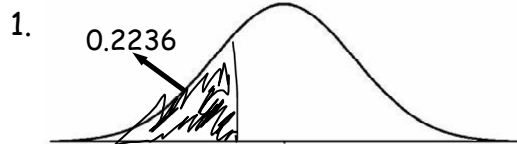## Warm-up:

Find the z-score that corresponds to the given area under the standard normal curve.

1.
0.2236

2.
0.4357

3. A test's scores are normally distributed with a mean of 89 and a standard deviation of 4. Find the x-score that corresponds to a z-score of 1.87

4. A bank's loan officer rates applicants for credit. The ratings are normally distributed with a mean of 200 and a standard deviation of 50. If a sample of 60 different applicants are randomly selected, find the probability that their mean is above 212.