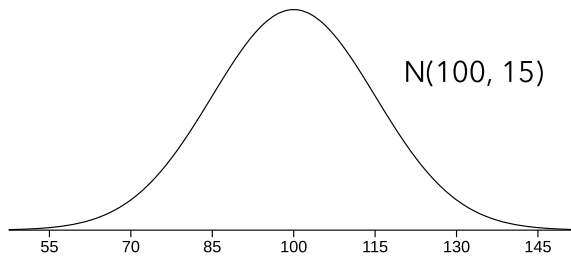


1.
 - a. 0.2119
 - b. 0.8894
 - c. 0.0119
 - d. 0.0119

2.
 - a.



- b. 1.33 standard deviations below the mean
 - c. 0.0912
 - d. 0.0038
3.
 - a. 0.0495
 - b. 0.1611
 - c. 0.7895
 - d. 59.117 bpm
4.
 - a. 0.1056
 - b. 0.0062
 - c. $(600)(22)(0.0062) = \$81.84$
5.
 - a. 20% of homes in Atlanta have a value less than or equal to \$120,000.
 - b. $z = -1.20$. The small home has a value that is 1.20 standard deviations below the mean of \$386,122.
 - c. No. If the distribution of home values were approximately normal, only 11.51% of homes would have a value less than or equal to \$120,000 (not 20%). Alternatively, a home with no value (\$0) would be less than 2 standard deviations below the mean of \$386,122.
6.
 - a. $z = 0.58$. Paige's chemistry exam score is 0.58 standard deviations above the mean of 88.
 - b. This is not possible because the distribution of scores does not follow a normal distribution.

7. B

8. D