

For each normal distribution, determine the percentage of items that fall within the given boundaries.

1. A set of numbers are normally distributed such that the mean is 106 and the standard deviation is 2.
  - a) What percentage of numbers is more than 104?
  - b) What percentage of numbers is more than 110?
  - c) What percentage of numbers is less than 108?
  - d) What percentage of numbers is less than 100?
  - e) What percentage of numbers is between 102 and 112?
  - f) What percentage of numbers is between 100 and 106?
2. A set of numbers are normally distributed such that the mean is 40 and the standard deviation is 5.
  - a) What percentage of numbers is more than 30?
  - b) What percentage of numbers is more than 45?
  - c) What percentage of numbers is less than 40?
  - d) What percentage of numbers is less than 50?
  - e) What percentage of numbers is between 35 and 45?
  - f) What percentage of numbers is more than 35?
3. A set of numbers are normally distributed such that the mean is 5.1 and the standard deviation is 0.9.
  - a) What percentage of numbers is between 6.0 and 6.9?
  - b) What percentage of numbers is greater than 6.9?
  - c) What percentage of numbers is between 4.2 and 6.0?
  - d) What percentage of numbers is less than 4.2?
  - e) What percentage of numbers is less than 5.1?
  - f) What percentage of numbers is between 4.2 and 5.1?
4. A set of numbers are normally distributed such that the mean is 76 and the standard deviation is 10.
  - a) What percentage of numbers is greater than 96?
  - b) What percentage of numbers is less than 66?
  - c) What percentage of numbers is between 66 and 86?

5. A set of numbers are normally distributed such that the mean is 5.00 and the standard deviation is 0.03.
- a) What percentage of numbers is less than 4.94?
  - b) What percentage of numbers is between 4.97 and 5.03?
  - c) What percentage of numbers is greater than 5.03?
6. A set of numbers are normally distributed such that the mean is 50.0 and the standard deviation is 0.2.
- a) What percentage of numbers is less than 49.8?
  - b) What percentage of numbers is greater than 50.4?
  - c) What percentage of numbers is between 49.6 and 50.4?