Name: _____   Class: _____   Date: _____

1. Mario moved from a city to a small town. The population of the city is 6×10^5, which is about 15 times as great as the small town. Which expression could represent the approximate population of the small town?
   (2 points)

   a. 4×10^3 b. 4×10^4 c. 9×10^5 d. 9×10^6

2. The speed of light in a vacuum is 299,792,458 meters per second. Which number written in scientific notation, is the **best** approximation of the speed of light?
   (2 points)

   a. 0.3×10^7 meters per second   c. 3.0×10^7 meters per second

   b. 0.3×10^8 meters per second   d. 3.0×10^8 meters per second

3. Ellentown College has approximately 3×10^3 students and Pengrove University has approximately 30,000 students. How many times as much is the number of students at Pengrove University as the number of students at Ellentown College?
   (2 points)

   a. 1   b. 10   c. 30   d. 100

4. A certain human red blood cell has a diameter of 0.000009 meters. Which expression represents this diameter, in meters, in scientific notation?

   (2 points)

      a. 9×10^{-6} b. 9×10^{-5} c. 9×10^{6} d. 9×10^{5}

5. George and Veronica are both musicians who sell their songs online. During the same year, George sold 8×10^{5} downloads of his songs and Veronica sold 4×10^{6} downloads of her songs. How many times as much is the number of songs that Veronica sold than the number of songs that George sold?

   (2 points)

      a. 2   b. 5   c. 20   d. 40