1. After 6 years, Nelson had $1,825.29 in his bank account. He invested in “Holla I Got the Dolla” Bank that awarded him 3.5% annual interest compounded monthly. How much money did Nelson deposit originally?
2. After 2 years, Bonnie had $1,161.20 in her money market account. She remembered that she deposited $985 in the account after she won the money at the “Schweaty Betty” marathon. What was the annual interest rate if it was compounded semiannually?
3. Write the equation of the exponential function that has an asymptote at y = 0, and goes through the points (-2, -15.75) and (3, -56/27).
4. The sloth population in South America is slowly decreasing because of the diminishing rainforests. In 2012 the sloth population was approximately 304 sloths. In 2017 the sloth population reduced to 112 sloths. What was the sloth population in the year 2000 if we assume the rate of decrease remained the same each year?
5. In the year 2002, there were approximately 1,250 students who owned an iPod at Haverford High School. In the year 2008 only 297 students had an iPod. What was the rate of decrease in the number of iPods at HHS each year?
6. Solve the system and determine the sum of the solutions.

 