Algebra 1

Assignment – Supplemental Problems

Name_____

Date_____ Period____

1.) Jacob and DeShawn are selling cheesecakes for a school fundraiser. Customers can buy French silk cheesecakes and strawberry cheesecakes. Jacob sold 12 French silk cheesecakes and 5 strawberry cheesecakes for a total of $105. DeShawn sold 2 French silk cheesecakes and 1 strawberry cheesecake for a total of $19. Find the cost each of one French silk cheesecake and one strawberry cheesecake.

2.) Shreya and Molly each improved their yards by planting rose bushes and geraniums. They bought their supplies from the same store. Shreya spent $120 on 12 rose bushes and 4 geraniums. Molly spent $56 on 1 rose bush and 8 geraniums. Find the cost of one rose bush and the cost of one geranium.

3.) A right triangle has a base that is seven times greater than its height. The hypotenuse is 50 cm. Solve for the base and height.

4.) The water park is a popular field trip destination. This year the senior class at High School A and the senior class at High School B both planned trips there. The senior class at High School A rented and filled 2 vans and 3 buses with 150 students. High School B rented and filled 12 vans and 8 buses with 440 students. Each van and each bus carried the same number of students. How many students can a van carry? How many students can a bus carry?