Math 1165
Autumn 2012

Supplemental Problems for Section 2.3

1. Suppose a hen and a half lays an egg and a half in a day and a half, how many eggs will 6 hens lay in 4 days? How many days will it take for 8 hens to lay 16 eggs? How many hens would it take to lay 12 eggs in three days? How many hens would it take to lay a dozen eggs per week? Explain your reasoning.

2. Laine likes both running and cycling. When running, she averages 6 mph; when cycling, she averages 12 mph.

a. On Friday afternoon, just as Laine got off the bus, she realized that she had left her bicycle at school. In order to have her bicycle at home for the weekend, she ran back to school, and then rode her bike home. What was her average speed for the round trip? Explain your reasoning.

b. On Saturday, Laine completed a workout in which she split the time evenly between running and cycling. What was her average speed for the workout? Explain your reasoning.

c. Why was her average speed on Saturday different from her average speed on Friday?