# Problem of the Week
## Problem B
## A Chicken and Egg Problem

Kamini raises chickens in her backyard, which lay an average total of 7 eggs per day. She has three customers who buy a dozen eggs from her each week, paying $5 per dozen. She keeps the remaining eggs for herself.

(a) How many eggs per week should Kamini expect to keep for herself?

(b) If the chickens continue to lay the same average number of eggs throughout the year and the customers continue to buy the same weekly amount, how much money can Kamini expect to make in one year?

(c) Chickens normally lay eggs for about four years. However, they do not lay eggs while moulting (losing then regrowing their feathers), which they do for 6 to 12 weeks per year. If Kamini's chickens maintain laying an average total of 7 eggs per day throughout the four years, except when they are moulting, and the customers continue to buy the same weekly amount, what is the maximum amount of money Kamini could make over those four years?



**THEME** **NUMBER SENSE**