## CASE: Break-Evens for Individual Products in a Multiproduct Company

Jasmine Park encountered her boss, Richard Johnson, at the coffee machine in the lobby. Richard is the vice president of marketing at Down South Lures Corporation. Jasmine was puzzled by some calculations she had been doing, so she asked him:



**Jasmine:** "Richard, I'm not sure how to go about answering the questions that came up at the meeting with the president yesterday."

Richard: "What's the problem?"

**Jasmine:** "The president wanted to know the break even for each of the company's products, but I am having trouble figuring them out."

**Richard:** "I'm sure you can handle it, Jasmine. And, by the way, I need your analysis on my desk tomorrow morning at 8:00 sharp so I can look at it before the follow-up meeting at 9:00."

Down South Lures makes three fishing lures in its manufacturing facility in South Wales. Data concerning these products appear below.

	Frog	Minnow	Worm
Normal annual sales	100,000	200,000	300,000
volume			
Unit selling price	£2.00	£1.40	£0.80
Variable cost per unit	£1.20	£0.80	£0.50

Total fixed expenses for the entire company are £282,000 per year.

All three products are sold in highly competitive markets, so the company is unable to raise its prices without losing unacceptable numbers of customers.

The company has no work in process or finished goods inventories due to an extremely effective just-in-time manufacturing system.

## Required:

- 1. What is the company's overall break-even point in total sales dollars?
- 2. Of the total fixed costs of £282,000, £18,000 could be avoided if the Frog lure product were dropped, £96,000 if the Minnow lure product were dropped, and £60,000 if the Worm lure product were dropped. The remaining fixed costs of £108,000 consist of common fixed costs such as administrative salaries and rent on the factory building that could be avoided only by going out of business entirely.
  - a. What is the break-even point in units for each product?
  - b. If the company sells exactly the break-even quantity of each product, what will be the overall profit of the company? Explain this result.