<u>A Fishy Story</u>

Every week the LoCost supermarket chain sets prices on its fresh fish. The chart shows the wholesale and the corresponding retail prices of fish filets for the week of January 2, 2000.

	wholesale	retail
Cod	6.35	7.99
Haddock	6.55	7.99
Sole	6.45	6.99
Blue cod	3.75	4.49
Hake	5.55	6.99
Catfish	3.10	3.99
Bluefish	3.85	4.99
Salmon	4.85	4.99
Monktail	5.10	6.99
Orange roughy	7.85	9.99
Chowder fish	2.50	3.59
Finnan Haddie	8.55	11.99
Sole	6.45	6.99

Fillets

- 1. On a sheet of graph paper, draw a scatter plot of the price data. Plot the wholesale prices on the horizontal axis and the retail prices on the vertical axis.
- 2. A *line of best fit* is a straight line that fits a set of data as closely as possible. Add a line of best fit to your graph.
- **3.** The line of best fit shows a relationship between the wholesale prices and the retail prices. Describe this relationship.

4. Assume that the salmon fillets represent half the sales (in pounds of fish sold) for the week and all the other fish were sold in equal quantities. What percent of the retail sales is profit?

5. If, in question 4, the salmon fillets are only one quarter of the sales instead of one half. Without calculating the actual profit percentage, would the percent of profit be greater or less than the one you found in question 4? Justify your answer.