Chapter Problem

Job Prospects

Gina is in her second year of business studies at university and she is starting to think about a job upon graduation. She has two primary concerns—the job market and expected income. Gina does some research at the university's placement centre and finds employment statistics for graduates of her program and industry surveys of entry-level salaries.

Year	Number of Graduates	Number Hired Upon Graduation	Mean Starting Salary ($000)
1992	172	151	26
1993	180	160	27
1994	192	140	28
1995	170	147	27.5
1996	168	142	27
1997	176	155	26.5
1998	180	160	27
1999	192	162	29
2000	200	172	31
2001	220	180	34

1. How could Gina graph this data to estimate
   - **a)** her chances of finding a job in her field when she graduates in two years?
   - **b)** her starting salary?
2. What assumptions does Gina have to make for her predictions? What other factors could affect the accuracy of Gina's estimates?

This chapter introduces statistical techniques for measuring relationships between two variables. As you will see, these techniques will enable Gina to make more precise estimates of her job prospects.

Two-variable statistics have an enormous range of applications including industrial processes, medical studies, and environmental issues—in fact, almost any field where you need to determine if a change in one variable affects another.