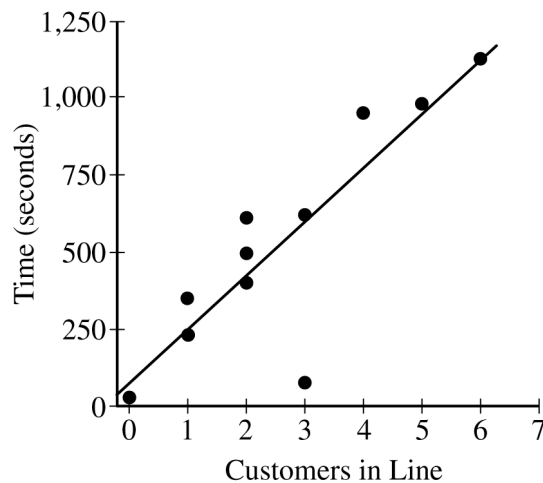**STATISTICS**
SECTION II
Part A
Questions 1-5
Spend about 1 hour and 5 minutes on this part of the exam.
Percent of Section II score—75

Directions: Show all your work. Indicate clearly the methods you use, because you will be scored on the correctness of your methods as well as on the accuracy and completeness of your results and explanations.

1. The manager of a grocery store selected a random sample of 11 customers to investigate the relationship between the number of customers in a checkout line and the time to finish checkout. As soon as the selected customer entered the end of a checkout line, data were collected on the number of customers in line who were in front of the selected customer and the time, in seconds, until the selected customer was finished with the checkout. The data are shown in the following scatterplot along with the corresponding least-squares regression line and computer output.

Predictor	Coef	SE Coef	T	P
Constant	72.95	110.36	0.66	0.525
Customers in line	174.40	35.06	4.97	0.001

S = 200.01   R-Sq = 73.33%   R-Sq (adj) = 70.37%

(a) Identify and interpret in context the estimate of the intercept for the least-squares regression line.

(b) Identify and interpret in context the coefficient of determination, r^2.

(c) One of the data points was determined to be an outlier. Circle the point on the scatterplot and explain why the point is considered an outlier.

GO ON TO THE NEXT PAGE.