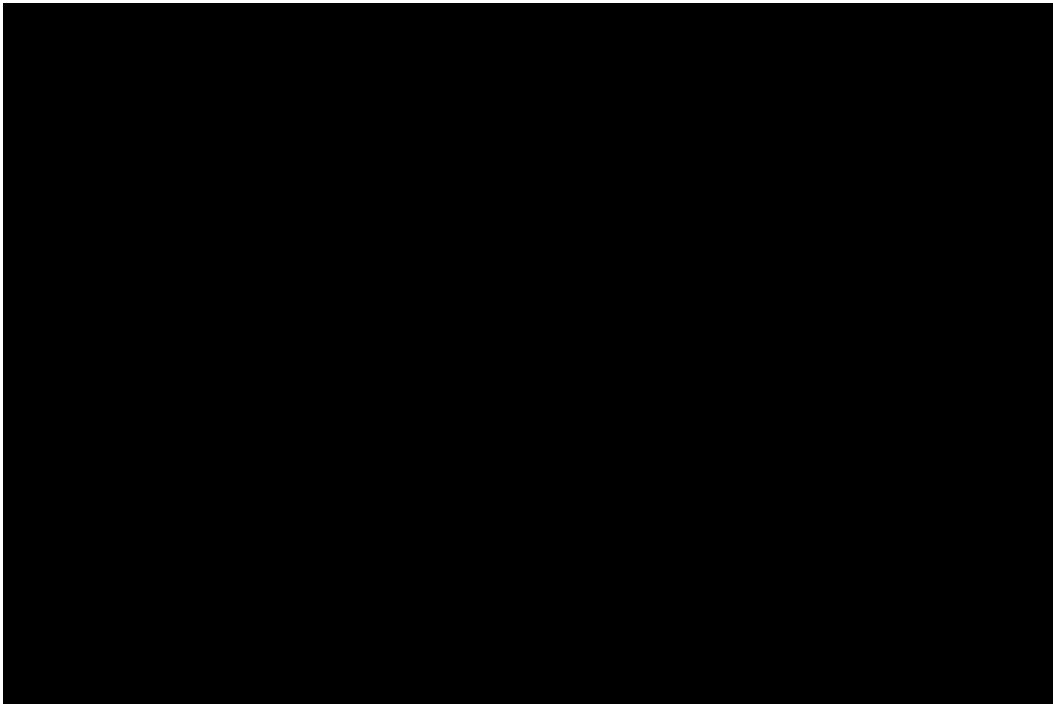# Formative Assessment

A. Fill in the blank with the correct word or phrase.
  1. The x-variable is called the _____ variable.
  2. The y-variable is called the _____ variable.
  3. In the regression model, the random variable ε is called the _____.

B. For each set of data below, do the following.
  a. Develop a scatter diagram for these data. Draw a straight line through the data.
  b. Compute the value of b_0 and b_1.
  c. Determine the least squares estimated regression line. Give an interpretation of b_0 and b_1.
  d. Use the estimated regression equation to predict the value of the independent variable for each of the x-values given. Find the residuals.

  1. The data below gives the test scores and the statistics grades of a random sample of 8 students.

Test Score (x)	60	66	44	70	50	64	88	62
Statistics Grade (y)	73	76	61	77	68	74	94	68

2. In an urban area, a random sample of 8 houses was chosen. Data on
    floor areas (in square meters) and house prices (in million pesos) are
    tabulated below.

Floor Area (x)	80	76	60	58	58	90	90	100	140
House Price (y)	1.5	1.3	0.9	1.0	1.0	1.9	2.0	2.5	3.0