X 5 3 2 6 4 1
Y 8 8 8 4 13 13

x	y	$x-\bar{x}$	$(x-\bar{x})^2$	$y-\bar{y}$	$(x-\bar{x})(y-\bar{y})$
$\sum x_i =$	$\sum y_i =$	$\sum x_i - \bar{x} =$	$\sum (x_i - \bar{x})^2 =$	$\sum (y_i - \bar{y}) =$	$\sum (x_i - \bar{x})(y_i - \bar{y}) =$

a. Complete the entries in the table. Put the sums in the last row. What are the sample means x and y?

b. Calculate least square coefficients for the slope and intercept of the regression of y on x; and state their interpretation.

c. Use the least squares estimates from part(b) to compute the fitted values of y, and complete the remainder of the table below. Put the sums in the last row.

$\mathbf{x}$	$\mathbf{y}$	$\hat{\mathbf{y}}_i$	$\hat{\mathbf{e}}_i$	$\hat{\mathbf{e}}_i^2$	$\mathbf{x}_i\hat{\mathbf{e}}_i$
$\sum \mathbf{x}_i =$	$\sum \mathbf{y}_i =$	$\sum \hat{\mathbf{y}}_i =$	$\sum \hat{\mathbf{e}}_i =$	$\sum \hat{\mathbf{e}}_i^2 =$	$\sum \mathbf{x}_i\hat{\mathbf{e}}_i =$

d. What is the $\hat{\sigma}$ for this regression?