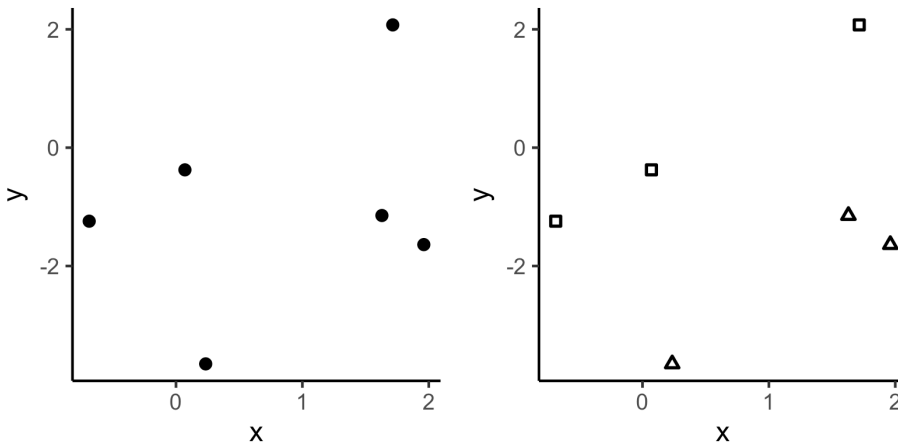


Name:

Date:

Quiz #7



The two figures above show the same x-y data. The one on the right encodes a second predictor variable as shapes.

On the left figure, sketch the line for \hat{y} for the following model.

$$y \sim \text{Normal}(\mu, \sigma)$$

$$\mu = \beta_0 + \beta_1 x$$

On the right figure, sketch the line for \hat{y} for the following model (where z is represented by the shapes).

$$y \sim \text{Normal}(\mu, \sigma)$$

$$\mu = \beta_0 + \beta_1 x + \beta_2 z$$

In both figures, graphically indicate what each coefficient represents.