- *I can determine the strength and direction of the linear model based on the correlation coefficient.*

  o When computing Linear Regression on the calculator, the correlation coefficient is the

    __r__ -value that is given.

  o It is always a number between __-1__ and __1__.

  o It indicates the __direction__ and __Strength__ between the variables.

  o If r is __positive__, the slope of the line is positive and the correlation is positive.

  o If r is __negative__, the slope of the line is negative and the correlation is negative.

  o If r is closer to 1 or -1, the association is __Strong (er)__.

  o If r is closer to 0, the association is __weak (er)__.

After taking notes above, describe what the following correlation coefficients would mean. Be sure to describe their direction and strength!

A. r = 0.99928 __positive, strong correlation__

B. r = -0.97546 __negative, strong__

C. r = 0.67823 __positive, moderate__

D. r = -0.21236 __negative, weak__

Sketch an example of what the scatterplot would look like for the *r*-values above.

A.



B.



C.



D.