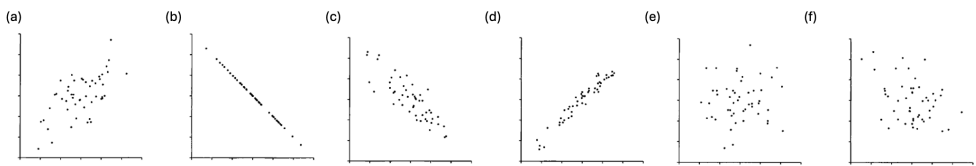
Correlation Coefficients

The figure below shows six scatter diagrams for hypothetical data. The correlation coefficients, given in scrambled order, are:

$$-0.85,\ -0.38,\ -1.00,\ 0.06,\ 0.97,\ 0.62.$$

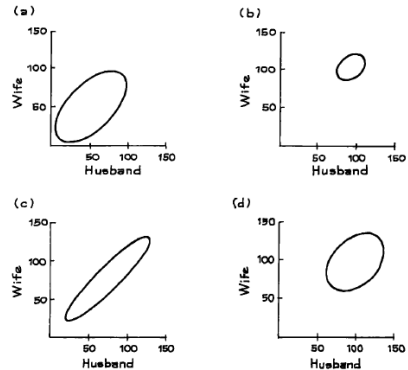
Match each scatter diagram with its corresponding correlation coefficient.



Husband Wife Example

A study of the IQs of husbands and wives obtained the following results:

- $\mu_X = 100$ (husbands)
- $\mu_Y = 100$ (wives)
- $\sigma_X = 15$ (husbands)
- $\sigma_Y = 15$ (wives)
- $\rho_{XY} = 0.6$



Which scatter diagram matches these data? Briefly explain why you reject the others.