Please break up into groups of 2 or 3, (each person will hand in his/her own worksheet). Generate examples of these five types of relationships. For each example, remember to complete variable names, and values along each axis (real numbers), and describe the relationship in words.

1. Describe one positive correlation, draw a scatterplot (label axes), and describe, the direction and strength of the relationship

   ![Graph showing a strong positive correlation between heights of daughters and heights of their mothers.](image)

   This shows the strong positive (r = +0.8) relationship between the heights of daughters (in inches) with heights of their mothers (in inches).

   - Variable name is listed clearly
   - Both axes have real numbers listed
   - Variable name is listed clearly
   - Description includes:
     - Both variables
     - Strength (weak, moderate, strong)
     - Direction (positive, negative)
     - Estimated value (actual number)

2. Describe one negative correlation, draw a scatterplot (label axes), and describe, the direction and strength of the relationship

   ![Graph showing a negative correlation.](image)
3. Describe one zero correlation, draw a scatterplot (label axes), and describe, the direction and strength of the relationship

4. Describe one perfect correlation, draw a scatterplot (label axes), and describe, the direction and strength of the relationship

5. Describe one curvilinear relationship, draw a scatterplot (label axes), and describe, the direction and strength of the relationship  (Note: correlation of a curvilinear relationship will probably be close to zero)