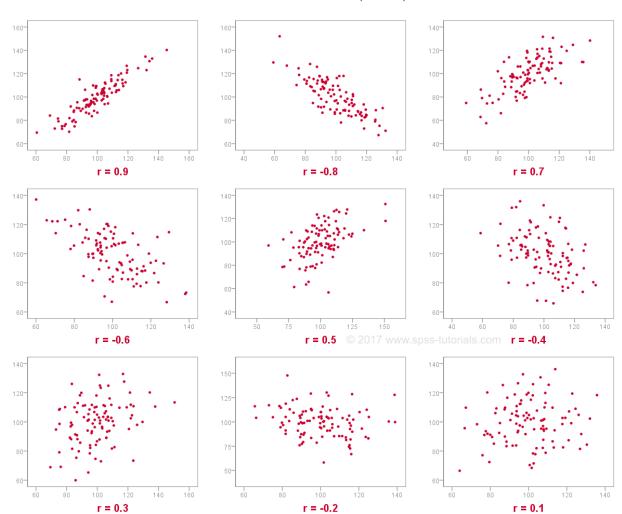
Quiz: Understanding Correlation & Correlation Coefficient

Directions: Which of the following news reports are examples of a positive correlation, and which are examples of negative correlation?

- 1. The more children and youth used various media, the less happy they were with their lives.
- 2. The less sexual content teens saw on TV, the less likely they were to have sex.
- 3. The longer children were breast-fed, the greater their later academic achievement.
- 4. The more income rose among a sample of poor families, the fewer psychiatric symptoms their children experienced. _______.
- 5. Examine the graphs below, then explain whether each one has a negative, zero, or positive correlation AND whether it has a strong or weak correlation.

(PEARSON) CORRELATIONS VISUALIZED AS SCATTERPLOTS



Read the Examples of Negative Correlation

Directions: After reading the examples, write <u>3 more examples of negative correlation</u>.

- A student who has many absences has a decrease in grades.
- As weather gets colder, air conditioning costs decrease.
- If a train increases speed, the length of time to get to the final point decreases.
- If a chicken increases in age, the amount of eggs it produces decreases.
- If the sun shines more, a house with solar panels requires less use of other electricity.
- If it is darker outside, more light is needed inside.
- If a car decreases speed, travel time to a destination increases.
- If a car tire has more air, the car may use less gas per mile.