

1. -0.5

2.
 - a. Reading and writing SAT score is the explanatory variable. Math SAT score is the response variable.
 - b. The linear relationship between the reading and writing SAT score and the math SAT score is a very strong and positive.
 - c. No, correlation does not imply causation even when the correlation is very strong.

3.
 - a. 0.6926
 - b. The linear relationship between foot length and arm span is moderately strong and positive.
 - c. 0.6926
 - d. The correlation did not change when we switched the explanatory and response variables. This will always be true.

4.
 - a. 3,256 feet
 - b. No, the strength of the linear relationship won't change. The correlation will stay the same.
 - c. No, correlation does not have units so there will be no change.

5.
 - a. There is a strong, positive linear relationship between the number of passengers and the number of flights. There are two unusual points at about (4600, 63) and (5500, 59).
 - b. Answers vary. (6000,62) fits in line with the other points and would strengthen the correlation.

6. A

7. C