17

Name _____ Date _____

1. Complete the table.

Word	Number of Consonants	Number of Vowels
imagine		
idea		
students		
enter		
letter		
right		
left		
data		
coordinates		
education		

2. Consider the coordinate plane.

   a. Label the *x*-axis Number of Consonants and the *y*-axis Number of Vowels. Label the title Word Data. Use the data collected in problem 1 to form ordered pairs. Plot points that represent the ordered pairs in the coordinate plane.
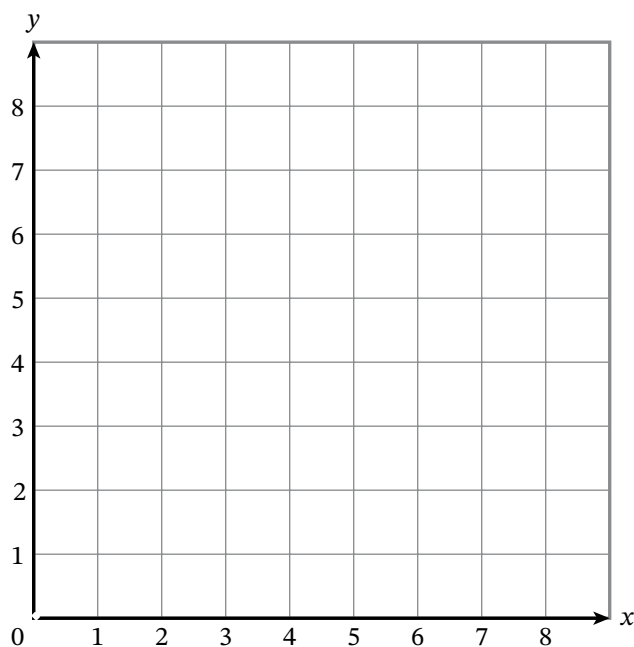
   b. Draw a dotted line from $(0, 0)$ to $(8, 8)$. How many plotted points lie on the dotted line? What does this tell you?

   c. How many plotted points lie below the dotted line? What do the words these points represent have in common?

   d. How many plotted points lie above the dotted line? What do the words these points represent have in common?

e. Why is the point that represents the word *idea* closer to the *y*-axis than to the *x*-axis?

f. Why is the point that represents the word *left* closer to the *x*-axis than to the *y*-axis?

g. What is an ordered pair for a point that lies on the same vertical line as the point that represents the word *letter*? What do the words these points represent have in common?

h. What is an ordered pair for a point that lies on the same horizontal line as the point that represents the word *letter*? What do the words these points represent have in common?

i. Why is the point that represents the word *education* left 2 units from the point that represents the word *coordinates*?

j. Why is the point that represents the word *students* down 3 units from the point that represents the word *coordinates*?

3. Consider the table.

    a. Write a word of each type, the number of consonants in the word, and the number of vowels in the word. Do not write the same words as the words in problem 1.

Type of Word	Word	Number of Consonants	Number of Vowels
1-letter word			
2-letter word			
3-letter word			
4-letter word			
5-letter word			
6-letter word			
7-letter word			
8-letter word			
9-letter word			
10-letter word			

b. Label the *x*-axis Number of Consonants and the *y*-axis Number of Vowels. Label the title Word Data. Use the data collected in part (a) to form ordered pairs. Plot points that represent the ordered pairs in the coordinate plane.
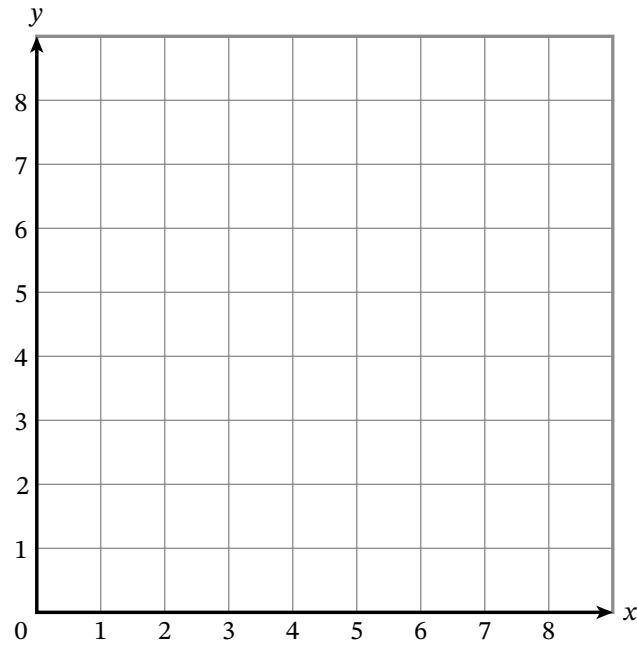
c. Based on the data, do you think it is true that the more consonants a word has, the more vowels it has? Why?