Systems of Equations - Day 4　　　　　　　Name_____
Beach Umbrellas　　　　　　　　　　　　Date_____Period_____

Beach Umbrellas

The two rental companies decide to change their deal. Surfside Rentals rents umbrellas for $3.50 an hour plus a deposit of $29.00. Beach Bums rents umbrellas for $7.00 an hour with a deposit of $15.00.

1.　　Write an equation for each company representing the relationship between the number of hours spent on the beach and the cost to rent an umbrella.

Surfside Rentals. _____　　　Beach Bums_____

2.　　Make a table to show the relationship between the number of hours for the rental and the cost of the rental for each business.
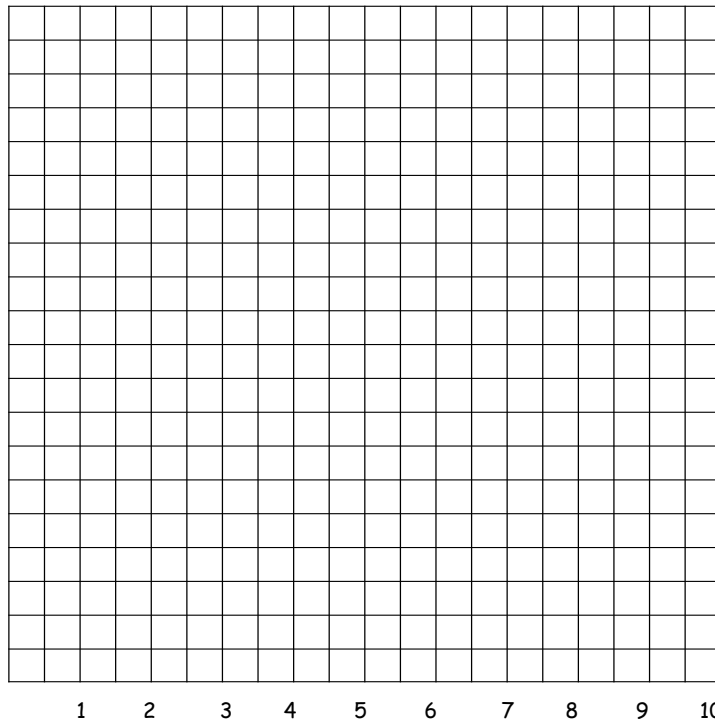
Surfside Rentals

Hours	Process	Cost
0		
1		
2		
3		
4		

Beach Bums

Hours	Process	Cost
0		
1		
2		
3		
4		

3.　　Graph the equations using the graph below. Be sure to label the independent and dependent variable.

　　　1　　2　　3　　4　　5　　6　　7　　8　　9　　10

4.   Describe the slope of each equation and explain what the slope represents in terms of this situation?

5.   Describe the y-intercept of each equation and explain what the y-intercept represents in terms of this situation?

6.   Which company offers the better price for renting umbrellas on the beach? Justify your answer.

7.   What is the solution to this system of equations? _____

   A. What does this solution represent on the graph? What does the solution represent in this situation?

8.   Which company's graph includes the point (5, 50)? What does this point represent in terms of renting umbrellas?

9.   If Jacqueline intended to lay on the beach from 9am to 3pm, which company should she rent from to spend the least amount of money? How much would she have to spend?

10.   Surfside Rentals decided to decrease their deposit by $7. How does this affect the situation and the solution to the system?