CONNECTING EQUATIONS, TABLES AND GRAPHS

A banquet hall charges an initial fee of $100 to rent the hall and an additional $20 per person attending.

1) Choose an appropriate letter to represent the number of people attending: _____

2) Choose an appropriate letter to represent the total cost of the rental: _____

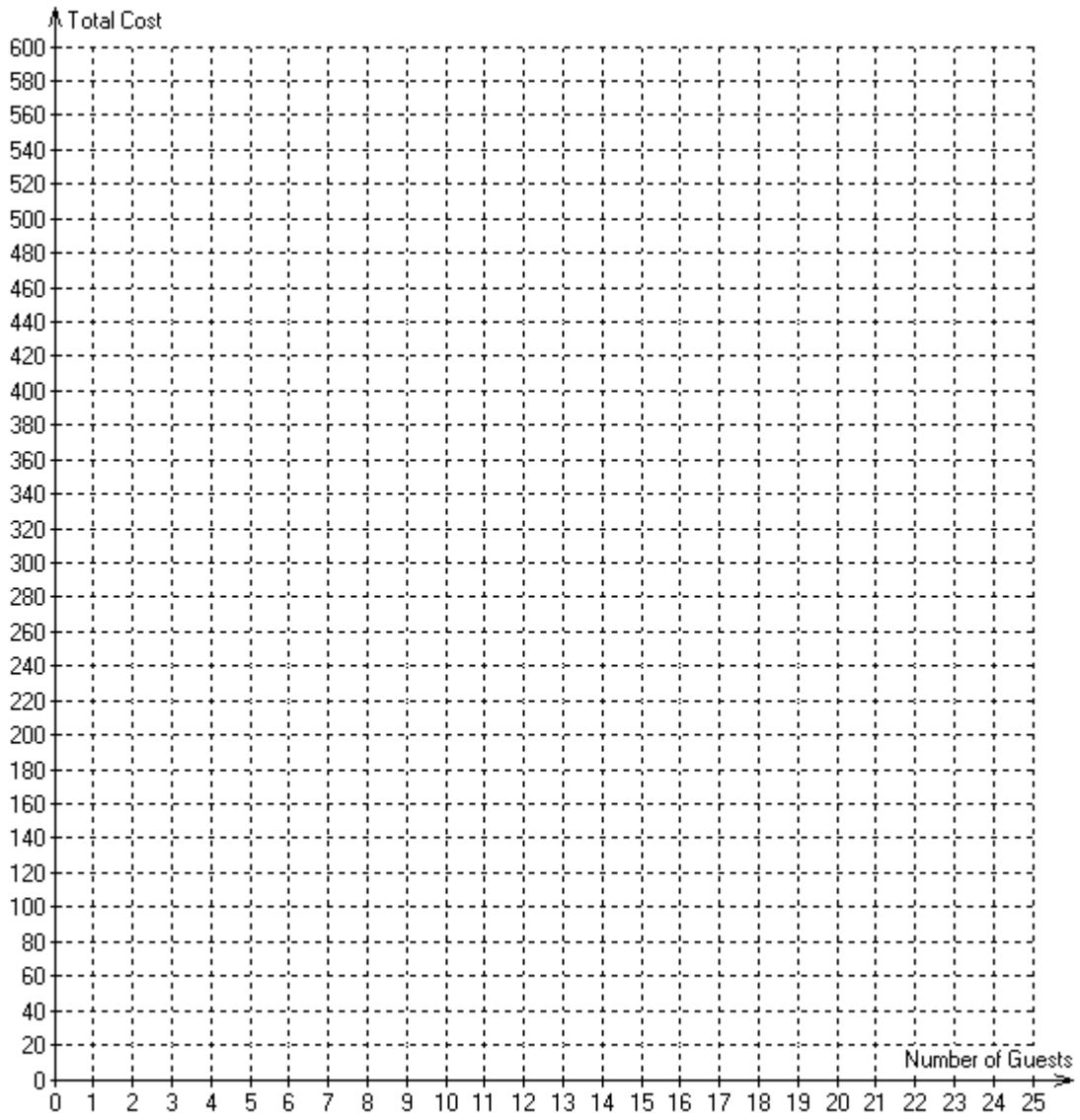
3) Create an algebraic equation to model the total cost of renting the hall.

4) Complete the following table.

Number of Guests	Total Cost
0	
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	

5) Look at your equation from question #4. **How do the numbers seen in the equation relate to the numbers in the table?**

6) Create a scatter plot for the table on the previous page.



7) Write your equation from question #4 again: _____

8) How do the numbers seen in the equation relate to the graph?

Practice

1) For each of the following scenarios, choose appropriate letters to represent the variables and create an algebraic equation to represent the relation.

Number of Minutes	Temperature (°C)
0	57
1	62
2	67
3	72
4	77
5	82

Equation: _____

_____ _____ ← Variables

2)

Distance (km)	Cost of Taxi Fare ($)
0	3.50
1	3.80
2	4.10
3	4.40
4	4.70
5	5.00

Equation: _____

_____ _____ ← Variables

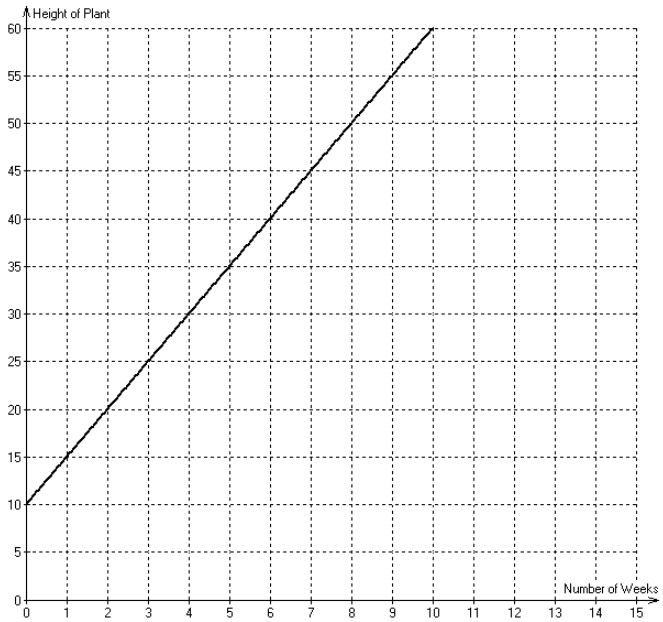
3)

Time (minutes)	Height of Balloon
0	13
1	11.25
2	9.5
3	7.75
4	6
5	4.25

Equation: _____

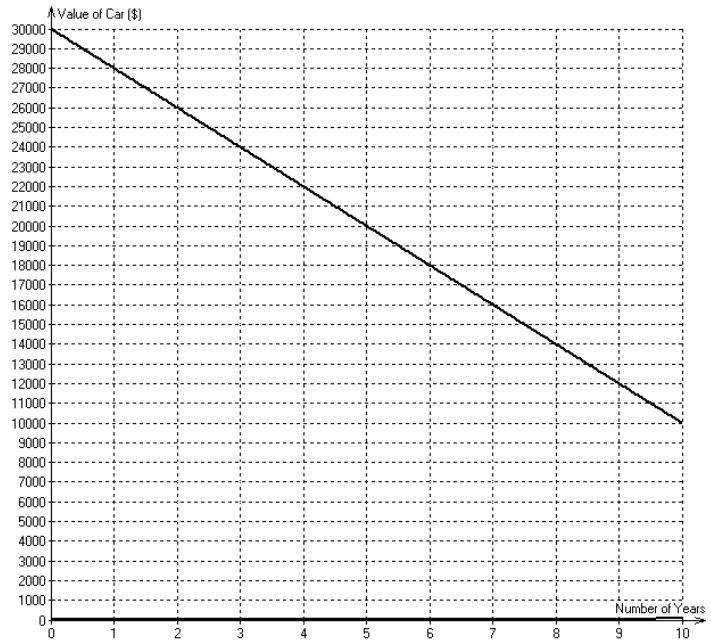
_____ _____ ← Variables

4)



Equation: _____

5)



Equation: _____

6) Shannon starts 50 m from the school and walks **away** from the school at a speed of 2 m/s. Find an equation for Shannon's distance from the school.

7) Rico starts 50 m from the school and walks **toward** the school at a speed of 2 m/s. Find an equation for Rico's distance from the school.