

**Movie Theater**

The theater offers a yearly membership for which customers pay a fee of \$50, after which they pay only \$1 per movie. Nonmembers pay \$3.50 per movie.

- Write an equation for member and non-member costs representing the relationship between the number of movies viewed the cost to see each movie.

Member Cost \_\_\_\_\_ Non Member Cost \_\_\_\_\_

- Make a table to show the relationship between the number of movies rented and the cost to see each movie.

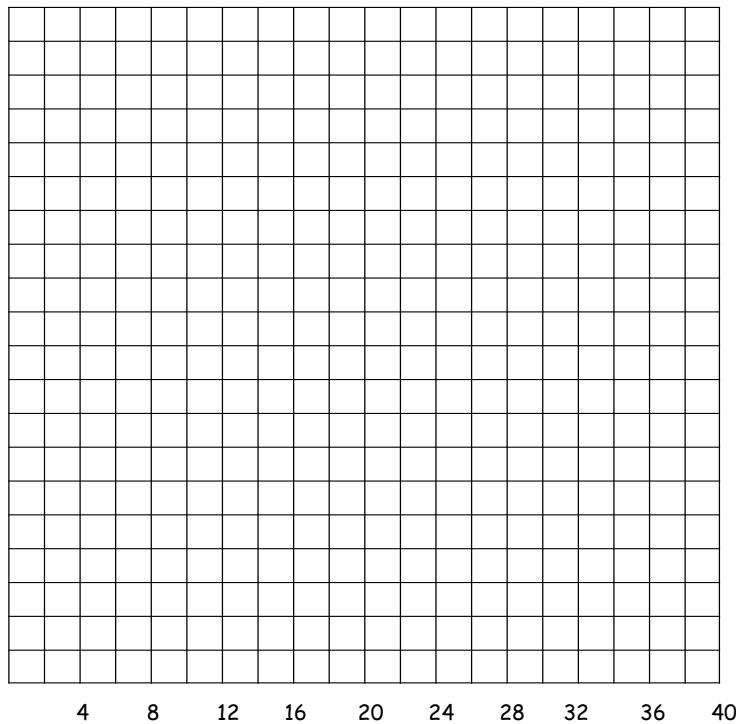
**Member Cost**

**Non Member Cost**

Movies	Process	Cost
5		
10		
15		
20		
25		

Movies	Process	Cost
5		
10		
15		
20		
25		

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



Systems of Equations - Day 4  
Movie Theater

Name \_\_\_\_\_  
Date \_\_\_\_\_ Period \_\_\_\_\_

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. Does being a member or a non-member offer a better price for seeing movies? 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 membership's graph includes the point (10, 35)? What does this point represent in terms of seeing movies?
9. If Chase intended to go to the movies twice a month, should he pay for a yearly membership or not? How much would he have to spend with and without a membership?
10. The membership fee was recently reduced by \$10. How does this affect the situation and the solution to the system?