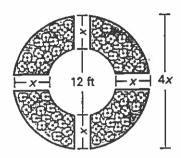
Linear Equations and Problem Solving	Name	
Worksheet #3		
	Date	Pd

Answer each question in complete sentences and show all work to justify your answer.

1. A pool membership costs \$300 a year. If it costs \$7 to go each day, how many days would you have to go to the pool to justify a membership?

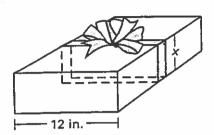
2. It costs \$1 to use the Hanby Bridge. The state of Delaware has decided to offer a monthly pass that will cost \$15 and will reduce the toll to \$.55 for pass holders. How many times per month must you use the bridge to justify the pass? Should people buy the pass?

3. A flower garden has the shape pictured below. The diameter of the inner circle is 12 feet. What are the lengths of the walkways?



4. Two cars travel the same distance. The first car travels at a rate of 40 miles per hour and reaches its destination in t hours. The second car travels at a rate of 55 miles per hour and reaches its destination 3 hours earlier than the first car. How long does it take for the first car to reach its destination? How long does it take for the second car to reach its destination?

5. It takes 65 inches of ribbon to make a bow and wrap the ribbon around a box. The bow takes 30 inches of ribbon. The width of the box is 12 inches. What is the height of the box?



6. At West High School, 362 students take Spanish. This number has been increasing at a rate of 20 per year. The number of students taking French is 259 and has been decreasing at a rate of about 3 per year. At these rates, when will there be two times as many students taking Spanish as taking French?

7. You and your friend are each driving 379 miles from Los Angeles to San Francisco. Your friend leaves first, driving 52 miles per hour. She is 32 miles from Los Angeles when you leave, driving 60 miles per hour. How far does each of you drive before you are side by side?

8. At Barton High School, 45 students are taking Japanese. This number has been increasing at a rate of 3 students per year. The number of students taking German is 108 and has been decreasing at a rate of 4 students per year. At these rates, when will the number of students taking Japanese equal the number taking German?