NAME: _____

DATE: _____

3-6 Homework

Applied polynomial problems

Solve the following problems. Remember...drawing a picture helps!! Show all work in the space provided. Circle or highlight your answer.

 A rectangular swimming pool is twice as long as it is wide. A small concrete walkway surrounds the pool. The walkway is a constant 2 feet wide and has an area of 196 square feet. Find the dimensions of the pool 	
2. Think of a number. Subtract 7. Multiply by 3. Add 30. Divide by 3. Subtract the original number. The result is always 3. Use polynomials to illustrate this number trick.	
3. The side of a cube is represented by x + 1. Find, in terms of x, the volume of the cube.	
x+1	

 4. Write a variable expression for the area of a square whose side is x + 8. 	
5. Let an integer be represented by x. Find, in terms of x, the product of three consecutive integers starting with x.	
6. The length of a rectangular window is 5 feet more than its width, w. The area of the window is 36 square feet. Write an equation that could be used to find the dimensions of the window.	