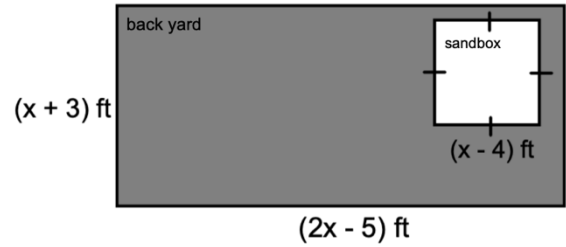Algebra 1
WS 7.7B Application Practice

1. The area covered by grass seed in your back yard is represented by the expression $6x^2 + 13x + 6$ square yards.
   a. Find the length and width of your backyard.

   b. Write the expression to represent the perimeter of your back yard.

2. The area of a rectangle is represented by the expression $9x^2 - 4$. Find the length of the sides of the rectangle.

3. The length of a rectangle is represented by $4x^2y$. If the area of the rectangle is $24x^3y + 42x^2y^3$, find the width of the rectangle.

4. The area of a rectangular swimming pool is $3x^2 - 17x - 6$. Find the expressions that represent the length and width of the swimming pool.

5. You are wanting to put in a sand box in your back yard. The dimensions of your back yard are below.

   a. Write a polynomial to represent the area of your back yard <u>before</u> you put in the sandbox.

   back yard

   sandbox

   (x + 3) ft

   (x - 4) ft

   (2x - 5) ft

   b. Write a polynomial to represent the area of your sandbox.

   c. You are going to seed your back yard after you put in your sandbox. Write a polynomial to represent how much area will you need to seed?