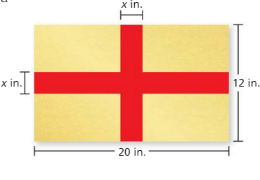
**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**CRITICAL THINKING**

**THE FLAG PROBLEM**

For Mr. Stevko’s class, you are asked to create a new country with your own government. To design the flag, you apply gray foil to a piece of black poster board to make the design shown.

1. Write an expression in simplest form that represents the area of the gray foil.
2. Find the area of the gray foil when x = 3.