Name: _____ Date: _____

2.2 Quadratic Equations from Statements

Use the vertex form of a quadratic equation to write the equation that matches the following statements. If need draw a picture to help illustrate the statement.

1. The area of a square with side length x, the area is multiplied by 3.	2. The area of a square with side length x, the area is multiplied by ½ .
3. The area of a square with side length x, where the side is increased by 2.	4. The area of a square with side length x, where the side is decreased by 7.
5. The area of a square with side length x where 5 square units are subtracted from the area.	6. The area of a square with side length x where 4 square units are added to the area.
7. The area of a square with side length x, where the side length is increased by 2, the area is multiplied by 3 and then 5 square units are added to the area.	8. The area of a square with side length x, where the side length is decreased by 3, the area is multiplied by 2 and then 7 square units are subtracted from the area.