Finding the Intersections of Quadratic and Linear Functions

Name:_____ Period:_____

Directions: Find the intersection of each set of functions. **Show all work.**

1. $f(x) = x^2 + 4x - 2$ and $g(x) = 3x + 4$

2. $f(x) = -x^2 - 12x - 29$ and $g(x) = 2x + 11$

3. $f(x) = x^2 + 14x + 52$ and $g(x) = -2x - 8$

4. $f(x) = -x^2 + 12x - 26$ and $g(x) = 3x - 12$

5. $f(x) = (x-3)^2 - 8$ and $g(x) = -2x + 1$

6. $f(x) = (x-4)^2 - 5$ and $g(x) = 3x - 13$

7. $f(x) = x^2 + 8x + 12$ and $g(x) = -2x - 26$

8. $f(x) = x^2 - 4x + 5$ and $g(x) = 2x - 1$