Math 4SN **Name: _____**

Questions on Semi-Linear Systems

Determine the points of intersection of each system

1. Parabola: zeros at 2 and 4 and an initial value of 8
   Line: slope of -4 through the point (1,4)

2. Parabola: initial value of -4 & vertex (-1, -2)
   Line: through points (-1,2) and (-5, 26)

3. Parabola: vertex (-1,3) through point (-3,-1)
   Line: slope of 2 and through point (-7,-9)

4. Parabola: zeros at -1 and -3 through point (2,-15)
   Line: through points (0,-9) and (3,-18)

5. Parabola: zeros at -1 and 1 through point (-3,-16)
   Line: y-intercept -22 and through point (2, -26)

6. Parabola: vertex (-4,1) through point (-3,0)
   Line: slope of -5 through point (1, -60)

7. Parabola: vertex (0,1) through point (-5, -74)
   Line: slope of 15 and through point (4,61)

8. Parabola: zeros -2 and 2 through point (9,77)
   Line: through points (-7,-115) and (2,-7)

9. Parabola: zeros at 0 and -2 through point(4,24)
   Line: through points (1,9) and (7,39)

10. Parabola: vertex (-4,-4) through point (-5,-7)
    Line: y-intercept at 8 through point (-8,-16)

Answers to Semi-Linear Systems

1. (2, 0) and (0, 8)

2. (1, -10) and (0, -4)

3. (-3, -1) and (-1, 3)

4. (2, -15) and (-3, 0)

5. (-3, -16) and (4, -30)

6. (-8, -15) and (5, -80)

7. (0, 1) and (-5, -74)

8. (3, 5) and (9, 77)

9. (-1, -1) and (4, 24)

10. (-5, -7) and (-4, -4)