Math III Spiral Review week of February 6 Due Friday

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

1. Add the polynomials:  $(4x^2 - 9x + 1) + (7x - 11x^2 - 8)$ 

2. Subtract the polynomials:  $(9x^2 + 9x - 11) - (12x^2 + 3x + 16)$ 

3. Multiply the polynomials: (4x - 5)(x + 8)

4. Multiply the polynomials:  $(7x - 2)(x^2 - 8x + 9)$ 

5. Multiply the polynomials:  $(3x^2 + 4)(x + 2)$ 

6. Factor:  $x^2 - 17x + 30$ 

7. Factor:  $3x^2 - x - 14$ 

8. Factor:  $81x^2 - 121$ 

9. Write the transformed function from  $f(x) = x^2$ : {shift left three, shift up one, reflect across x-axis}

10. Write the transformed function from  $f(x) = x^2$ : {shift right seven, shift down four}