$\qquad$

1. Add the polynomials: $\left(4 x^{2}-9 x+1\right)+\left(7 x-11 x^{2}-8\right)$
2. Subtract the polynomials: $\left(9 x^{2}+9 x-11\right)-\left(12 x^{2}+3 x+16\right)$
3. Multiply the polynomials: $(4 x-5)(x+8)$
4. Multiply the polynomials: $(7 x-2)\left(x^{2}-8 x+9\right)$
5. Multiply the polynomials: $\left(3 x^{2}+4\right)(x+2)$
6. Factor: $x^{2}-17 x+30$
7. Factor: $3 x^{2}-x-14$
8. Factor: $81 x^{2}-121$
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\}
