**Polynomials with Imaginary Roots HW**

Homework: Factor each expression.

1. 4d2 + 81 2. 3x2 + 147

3. 36n3 + 16n 4. 196f4 + 121

5. Throwback Review

(all throwbacks are still required!)

Determine all roots of the function

g(x) = 81x4 – 18x2 + 1

Solutions:

1. (2d + 9i)(2d – 9i) 2. 3(x + 7i)(x – 7i)

3. 4n(3n + 2i)(3n – 2i) 4. (14f2 + 11i)(14f2 – 11i)

5. x = 1/3 (M.2) and x = -1/3 (M.2)

\*Also remember to work on some Tenmarks! ☺