

## Assignment #9-5

## Secondary 3 Honors

Precalculus Book: Pg. 394 1, 13, 14, 15, 38, 40, 96, 110, 148

### Additional Problems:

1. Multiply  $(\sqrt{14} + i\sqrt{10})(\sqrt{14} - i\sqrt{10})$ . Simplify your answer.
2. Rewrite  $\frac{2+i}{2-i}$  without an imaginary number in the denominator.
3. Write the equation of the line that passes through the two points  $(-3,4)$  and  $(6,-8)$ .
4. If  $f(x) = 3x + 2$  and  $g(x) = x^3 - 1$ , find  $(f + g)(x)$ ,  $(f - g)(-1)$ , and  $(fg)(6)$ .
5. Find all six standard trig functions if  $\theta = -\frac{5\pi}{4}$ .