Precalculus: Homework
1/29-2/2

due: Tuesday:

Simplify and/or combine:

1. i^{47}
2. $(-i)^{23}$
3. $3i^{30}$
4. $i + i^2 + i^3 + i^4 + i^5$
5. $i^{50} + i^{51}$
6. $(i^n)^4$
7. $2\sqrt{-16} + 6\sqrt{-25} - 4\sqrt{-36}$
8. $4\sqrt{-2} \cdot 7\sqrt{-3}$
9. $24\sqrt{-8} \Big/ 3\sqrt{-2}$
10. $\sqrt{-27} + 3\sqrt{-48}$

Wednesday: read pp. 53-56

pp. 57-58 / #2, 4, 10, 11, 12, 30, 32, 34, 35, 36

Thursday: read pp. 56-57

1. pg. 58 /#22, 23, 24, 44
2. Find *x* and *y*: $2x - y + xi = 3 + 8i$
3. Find the absolute value of: (a) $5 - 7i$ (b) $-6 - 8i$
4. Solve for *x*:
   a. $ix^2 - 3x - 2i = 0$
   b. $x^2 - 6ix = 9$
   c. $x^2 + (1 + 2i)x + (-1 + i) = 0$

Friday: Find the square roots of: (a) $3 + 4i$ (b) $15 - 8i$

on: Monday: test