Math 1010 January 25, 2017 Homework 7

Do 1.8 # 1-65 odds from your textbook.

Simplify the following to standard complex form $a + bi$

1. i^5

2. i^{-18}

3. $\sqrt{-72}$

4. $(2 - 3i) + (7 - i)$

5. $(2 + 8i) - (8 - 3i)$

6. $5i(7 - 4i)$

7. $(4 + i)(7 - 4i)$

8. $(3 + 8i)(3 - 8i)$

9. $\frac{1}{3+8i}$

10. $\frac{3i}{4+i}$

11. $\frac{3-i}{2+5i}$

Consider the polynomial $p(x) = x^2 + 5x - 8$

12. $p(3i) =$

13. $p(3 - 2i) =$