HW #38: SHOW ALL WORK on a separate piece of paper.
Answer Section

1. $-8 - 15i$
2. $-1 - 4i$
3. $1 + 3i$
4. $14 - 5i$
5. $\dfrac{5}{2} - \dfrac{5}{2}i$
6. $\dfrac{-4}{25} + \dfrac{53}{25}i$
7. $\dfrac{2\sqrt{6} - \sqrt{3}}{7}$
8. $-1, 4$
9. $\dfrac{7}{3}, -2$
10. ± 2
11. $8 \pm \sqrt{22}$
12. $\dfrac{2 - \sqrt{3}}{2}, \dfrac{2 + \sqrt{3}}{2}$
13. $-\dfrac{1}{6} \pm \dfrac{\sqrt{13}}{6}$
14. $\dfrac{-3 + i\sqrt{71}}{10}, \dfrac{-3 - i\sqrt{71}}{10}$
15. $\pm 4\sqrt{6}$
16. $-6, 4$
17. $\pm i\sqrt{5}$
18. $-2 + \sqrt{10}$ and $-2 - \sqrt{10}$
19. $x = 2 \pm \sqrt{6}$
20. 2 rational solutions
21. 2 imaginary solutions
22. One real solution
23. 3
24. 2 ft
25. 2.17 seconds