

**Homework Sec. 1.3**

Simplify

1.  $-\sqrt{-4}$

2.  $\sqrt{-20}$

Solve

3.  $(4x-9)(4x+7)=0$

9.  $x^2+4x=3$

4.  $x^2-14x+13=0$

10.  $x^2=5-8x$

5.  $5x^2=15x$

11.  $x^2-6x+13=0$

6.  $5x^2=65$

12.  $x^2+35=5x$

7.  $x^2+6x+9=13$

13.  $x^2-5x-5=0$

8.  $2x^2+30=0$

Find the zeros of the function

14.  $f(x)=x^2-12x+45$

15.  $f(x)=3x^2-x+4$

1. $-2i$	6. $\pm\sqrt{13}$	11. $3 \pm 2i$
2. $2i\sqrt{5}$	7. $-3 \pm \sqrt{13}$	12. $\frac{5 \pm i\sqrt{115}}{2}$
3. $\frac{9}{4}, -\frac{7}{4}$	8. $\pm\sqrt{15}i$	13. $\frac{5 \pm 3\sqrt{5}}{2}$
4. $1, 13$	9. $-2 \pm \sqrt{7}$	14. $6 \pm 3i$
5. $0, 3$	10. $-4 \pm \sqrt{21}$	15. $\frac{1 \pm i\sqrt{47}}{6}$