**Math II Homework 3**

**Copy and solve the following problems. SHOW YOUR WORK!**

*Solve each equation. Identify any extraneous solutions.*

1. $\sqrt{15-x}$ = 4 2. $\sqrt{-3a}$ = 6

Simplify.

3. $\sqrt{12}$ + 6$\sqrt{27}$ 4. $\sqrt{18}$ + 5$\sqrt{2}$ - 3$\sqrt{32}$

5. (4 + $\sqrt{5}$)(3 + $\sqrt{5}$) 6. (3 - $\sqrt{6}$)2

7. 2$\sqrt{3}$ ∙ 5$\sqrt{27}$ 8. 3$\sqrt{2}$ ∙ 5$\sqrt{8}$

9. Find the roots of the equation 4x2 + 4x – 15 = 0.

10. Find the discriminant of the equation 2x2 + 7x – 15 = 0.