**HW – SOLVING BY QUADRATIC FORMULA AND SQUARE ROOTS**  NAME\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*Find the discriminant of each equations and then state the number and type of roots.*

1. $7x^{2}+5x+5=0$ 2. $6x^{2}+9x-6=0$ 3. $9x^{2}-6x+1=0$ 4. $-x^{2}+9x=-10$

*Solve each equation using the Quadratic Formula. Show all work. State the type of roots.*

5. $8x^{2}+9x+11=0$ 6. $4x^{2}-20=-12x$

7. $x^{2}-110=-x$ 8. $7x^{2}+2=0$

9. $6x^{2}+7x+10=0$ 10. $2x^{2}-93=5$

*Solve each equation using square roots. State the type of solutions that exist.*

11. $k^{2}=-18$ 12. $-5x^{2}=-500$

13. $7x^{2}-532=0$ 14. $-2x^{2}-150=0$

15. $7x^{2}-10=228$ 16. $x^{2}+1=0$