HW AFTER QUIZ – MIXED REVIEW NAME\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*Solve each equation by factoring.*

1. $2x^{2}+3x-20=0$ 2. $x^{3}-16x=0$

*Solve each equation by completing the square.*

3. $x^{2}+14x+85=0$ 4. $6x^{2}+7x+10=0$

*Solve each equation using the quadratic formula.*

5. $4x^{2}-12x-99=-8$ 6. $6x^{2}+2x+12=0$

*Solve each equation using square roots.*

7. $9x^{2}=252$ 8. $-2x^{2}-93=5$

*Sketch a picture of each function. Find all roots. SHOW ALL WORK.*

9. $x^{4}-15x^{2}+54=0$ 10. $x^{3}-4x^{2}+8x=0$

11. $x^{3}-x^{2}+x-1=0$ 12. $x^{3}+4x^{2}-5x=0$