Teacher: Castello

Course: Advanced Math

Periods: 1 & 2

Assignment: Weeks 5 (Not to be Graded)

Week 5 – Advanced Math Assignment (Not Graded)

Solve.

1. $\frac{x+3}{x-3}+\frac{x}{x-5}=\frac{x+5}{x-5}$

2. $3+\frac{10}{x}=\frac{x+9}{x-4}$

3. $(2x-1)(x-1)=(x-5)(2x-5)$

4. $t^3=9t^2$

5. $(x-5)^2=9$

6. $\left|\frac{x}{3}+\frac{2}{5}\right|=2$

Solve the inequalities.

7. $x+2\geq 15$

8. $|2x+3|<7$

9. $2x+6>12-4x$

10. $5(x-2)\leq 3+4(x+1)$

Solve by completing the square.

11. $x^2-4x+6=0$

12. $x^2+20x+4=0$

13. $4x^2-4x=3$

14. Find the equation of a line containing the points S(-3, 4) and T(6, -7) in slope-intercept and point-slope form.

15. Given the line $3x-5y=7$, find the point-slope form of the equation of a line through $(\sqrt{3},1)$ that is

a) parallel to the given line

b) perpendicular to the given line

16. Write the equivalent logarithmic expression for $5^x=125$.