Inequalities and More on Inequalities

1. 6x – 12 = 10(x – 4)

2. $\frac{3}{n}+\frac{7}{n}-\frac{5}{n}=3. $Solve for n.

3. Solve the equation: $\frac{-5}{y+4}+\frac{2}{y-4}=\frac{7}{y^{2}-16}$

4. i(6 - 3i)²

5. (6 + 7i)(6 – 7i)

6. $\frac{3-2i}{4-3i}$

7. 3 |4x – 10| + 20 = 26

8. Solve: 2 ≥ (3 – 2x) > -4

*Solve the following inequalities. Graph and express as interval.*

9. $\frac{1}{x-2} >0$

10. $\frac{x-2}{(x-5)(x+2)}\leq 0$

11. $\frac{5p}{p-5}>0$

12. 2|-11 – 7x| - 2 > 0

13. What is x < 3 and x > -5 as an interval? 14. What is x > 2 or x < -5 as an interval?

15. Express in terms of intervals: 12x² ≥ 3x 16. |8x – 1| < 6

17. (x – 2)(x + 3)(4 – x) ≤ 0 18. -3x² < -21x + 3