

Wootton High School

Name _____

ALGEBRA 1 Summer Review Assignment

Show all work for full credit. This will be your first graded assignment.

Due date: Third day of class

Combine Like Terms

1. $-9x + 6 + 17x$	2. $-15n + 2n + 13n$
3. $-9 - 8x + 4 + 10x$	4. $3x - 7x^2 - 4x + 3x^2$

Distribute

5. $-3(2y - 6)$	6. $-2(2x + 5y)$
7. $-(-x + 2)$	8. $2(-4x + 1)$

Distribute and Combine Like-Terms

9. $-3x + 3(x - 5)$	10. $2 - 5(3x + 1)$
11. $-2(x - 1) + 7$	12. $-2(x - 5) + 3(4x + 3)$
13. $2x - (3x - 1)$	14. $6(x + 3y) - 2(3x - 2y)$

Solve the one-step equations

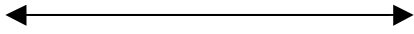
15. $x - 7 = -10$	16. $9 + x = -7$
17. $-2x = -16$	18. $-\frac{x}{3} = -4$
19. $\frac{2}{3}x = -10$	20. $\frac{x}{5} = \frac{4}{15}$

Solve the two-step equations

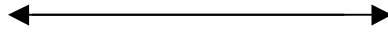
21. $-3x - 5 = -14$	22. $-x + 5 = 0$
23. $\frac{1}{5}x - 3 = -7$	24. $6 - 2x = 6$
25. $-\frac{2}{5}x + 4 = -2$	26. $5 - \frac{x}{6} = -10$

Graph the following inequalities on a number line

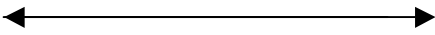
27. $x \geq -4$



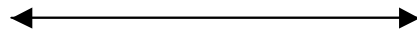
28. $-2 > x$



29. $\frac{1}{3} \leq x$



30. $x > \frac{5}{2}$

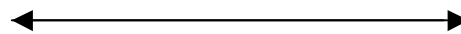


Solve and graph the following inequalities

31. $2x + 5 > 1$



32. $6 - x \leq -1$



Simplify the following fractions completely.

33. $\frac{3}{5} + \frac{1}{5} =$	34. $\frac{3}{4} + \frac{1}{3} =$
35. $\frac{1}{4} - \frac{4}{7}$	36. $\frac{3}{4} \cdot \frac{8}{9}$
37. $\frac{5}{3} \div \frac{2}{9}$	38. $\frac{5}{2} \cdot \frac{4}{25}$

Find the Greatest Common Factor (GCF)

39. 18 and 54	40. 15 and 50
41. 27 and 72	42. 39 and 169
43. 24 and 144	44. 60 and 75