

Unit 2: Equations and Inequalities
PRE-TEST

Solve each equation:

1. $-13 = x - 5$	2. $r + 3 = 19$
3. $-9x = -63$	4. $\frac{b}{13} = 7$
5. $\frac{x+6}{14} = -1$	6. $10(-4 + n) = -140$
7. $9 - 2k = 49$	8. $35 = -5(1 + b)$
9. $6(2a - 5) = -90$	10. $7 - 3(a - 3) = 4(2 - a)$
11. $\frac{ k+8 }{6} = 3$	12. $6 + 10 n + 1 = 96$

Solve each equation for the indicated variable:

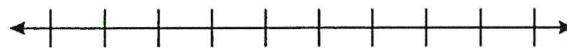
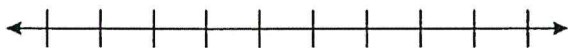
13. $z = m + a - b$, for a

14. $k - a = w - v$, for a

Solve each inequality and graph its solution on the number line provided:

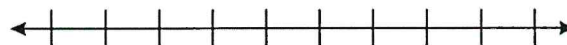
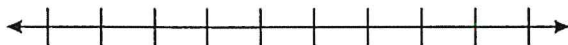
15. $-31 < n - 17$

16. $x - 14 \geq -23$



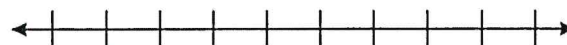
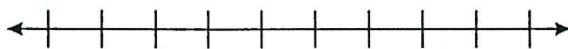
17. $-20 < \frac{k}{13}$

18. $-5x \leq -100$



19. $-10 + \frac{p}{10} \leq -8$

20. $-10 + 10p > 110$



21. $163 < 3(-8n - 2) + 1$

22. $-3 + 2(1 + 7b) \leq 7(b - 7) + b$

