

Equations and Inequalities
Algebra 2

Solve, check, and graph the following equations and inequalities.

$$1) \ -78 = -9k - 15 \quad 2) \ 63 = \frac{v}{3} + 39 \quad 3) \ -81 - 4g^2 = 115 \quad 4) \ x + 11x = -108$$

$$5) \ 3x + 7 + 3x = -35 \quad 6) \ 7x + 19 - 6x = 15 \quad 7) \ 6x = 3x + 21 \quad 8) \ 2d - 24 = 8d$$

$$9) \ 11 + 5a = 3a + 41 \quad 10) \ -2x + 23 = -17 - 10x \quad 11) \ 2(2x + 6) = 20$$

$$12) \ 102 = 6(3n + 2) \quad 13) \ 3(5v + 8) = 16v + 22 \quad 14) \ a + 12 > 21 \quad 15) \ b - 15 < 8$$

$$16) \ -3x + 7 < -17 \quad 17) \ -14x + 5x \geq -54 \quad 18) \ 2x - 24 \geq 8x \quad 19) \ -2x + 23 \leq -17 - 10x$$