

Equation Development 3.1

Algebra 2

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

1) $\frac{d}{-3} + 4 > 2$

2) $-32 > 5x + 4x + 13$

3) $-2x + 23 \leq -17 - 10x$

4) $7v^2 - 15 = 13$

5) $26 + 8x = 15x - 37$

6) $-132 = 4(-9 + 4q)$

7) $\frac{6}{7}X = \frac{3}{2}$

8) $\frac{2}{5}X - 3 = 17$

9) $9 - \frac{3}{2}X = 5$

10) $\frac{9}{5}x + \frac{2}{3}x + 2 = 10$

11) $|2c - 4| = 12$

12) $|t + 8| = -14$

13) $|6p - 3| + 15 = 48$

Solve and graph the following compound inequalities.

14) $3 < x < 8$

15) $-10 < 2x < 6$

16) $z < -7$ or $z > 4$

17) $a > 13$ or $a < -1$

18) $-8 < 2k \leq 10$

19) $5x < -15$ or $3x \geq 12$

20) $4 < t + 6 < 10$

21) $-17 \leq 3t + 1 < 1$

Solve the following literal equations.

22) $-\underline{h} + 5 = k$

23) $32 = -\underline{f} + g$

24) $-3\underline{a} - b = 19$

25) $\frac{-\underline{m}}{6} + n = 14$