Solving Equations & Inequalities: A Review

Solving Equations

Ex: $3(2z + 25) - 2(z - 1) = 78$

Ex: $\dfrac{2}{5}x + \dfrac{3}{7} = 1 - \dfrac{4}{7}x$

Ex: $5m - (5 + 4m) = (3 + m) - 8$

Compound Inequalities

"and"

Ex: $-4 < 4f + 24 < 4$

"or"

Ex: $a + 2 > -2$ or $a - 8 < 1$

Interval Notation

Absolute Value Equations

Ex: $8|w - 7| = 72$

Ex: $4|3x + 8| = 16x$

Ex: $|5x + 9| + 6 = 1$

Absolute Value Inequalities

Ex: $|3w + 2| \leq 5$

Ex: $|6r - 2| > 21$

Ex: $|x - 7| \leq -3$

Solving Literal Equations

Ex: $Ax + By = C$ Solve for x.

Ex: $\dfrac{a - 4b^2}{2c} = d$ Solve for a.

Ex: $A = p + prt$ Solve for p.