

Problem of the Day: Solve and graph the inequality.
 $4x - 3(x - 3) < (-3x + 3) - 3x$
 $4x - 3x + 9 < -3x - 3 - 3x$ $1x + 9 < -3$ $1x < -12$
 $4x - 3x + 9 < -3x - 3 - 3x$ $1x + 9 < -3$ $1x < -12$
 Plan for the Day: Collect Homework Week $3x < -12$
 Collect any signed tests - due Friday!
 Notes on solving literal equations and formulas
 More practice on solving literal equations/formulas
 Objective: We will be able to solve literal equations and formulas for a given variable.
 Happy Birthday Collin Caperton!!
 Good luck JH football and cheerleaders vs. Franklin!

Solve a formula or equation for a variable other than x-
 $d = rt$
 $\frac{d}{r} = t$
 solve like normal by using opposite operations to get specified variable by itself
 Example 1: Solve the equation $-5x + y = z$
 a. Solve for y $-5x + y = z$
 $+5x$ $+5x$
 $y = z + 5x$
 b. Solve for x $-5x + y = z$
 $-5x$ $-5x$
 $x = \frac{z - y}{-5}$

Example 2: Solve for y in $3y + z = am - 4y$
 $+4y$ $+4y$
 $7y + z = am - z$
 $7y = am - z$
 $7y = am - z$
 $y = \frac{am - z}{7}$
 Mrs. Brown
 Example 3: Solve $y = mx + b$ for x.
 $-b$ $-b$
 $y - b = mx$
 $\frac{y - b}{m} = x$

Example 4: Solve $x + 6y = z - w$ for y.
 $-x$ $-x$
 $6y = z - w - x$
 $6y = z - w - x$
 $y = \frac{z - w - x}{6}$
 Example 5: Solve for j.
 $aj + h(e + r) = 0$
 $aj + he + hr = 0$
 $aj + he + hr = 0$
 $aj + he = -hr$
 $aj = -hr - he$
 $\frac{aj}{a} = \frac{-hr - he}{a}$
 $j = \frac{-hr - he}{a}$
 $aj = -h(e + r)$
 $j = \frac{-h(e + r)}{a}$