Today's Plan:

Learning Target (standard): I will solve multi-step equations.

Students will: Complete practice problems over previous concepts at the boards, put up homework problems on the board and make necessary corrections to their own work, take notes over new material and complete practice problems over new concepts.

Teacher will: Provide practice problems over previous concepts, check homework problems for accuracy and provide students feedback, describe and provide examples of new concepts and assign students assessment problems over new concepts.

Assessment: Board work, homework check and homework assignment

Differentiation: Students will work at the board, go over and correct homework at their seats, actively engage in lecture over new concepts, practice new concepts with the aid of other students and the teacher and complete homework assignment.

NAME _____ #20

BELL RINGER

1.) Solve $3x + 1 = 5x$.

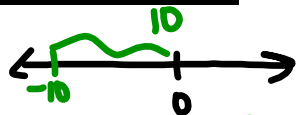
$-3x \quad -3x$

$\frac{1}{2} = \frac{2x}{2}$

$\frac{1}{2} = x$

2.) Evaluate $|-6 + x|$ for $x = -4$.

$|-6+(-4)| = |-6-4| = |-10| = 10$



↑ distance from 0

3.) Simplify $\frac{(6-4)^2}{2}$.

$= \frac{2^2}{2} = \frac{4}{2} = 2$

12) $-7(-8n-6)-5(8n+1)=-4n+7+n-8$

$56n+42-40n-5=-4n+7+n-8$

$16n+37=-3n-1$

$+3n \qquad +3n$

$19n+37=-1$

$-37 \qquad -37$

$\frac{19n}{19}=\frac{-38}{19}$

$n=-2$

The following solution to the equation has a mistake that has been discovered. Describe what the mistake is and how it can be corrected. Solve the equation correctly.

Step 1: $2(x+1)-3(-2x+1)=15$

Step 2: $2x+2+6x-3=15$

Step 3: $-4x-1=15$

Step 4: $-4x=16$

Step 5: $x=-4$

$2x+2+6x-3=15$

$8x-1=15$

$8x=16$

$x=2$

1) Is (3,7) a solution to the equation $y = -2x - 3$?

$y = -2x - 3$

$7 = -2(3) - 3$

$7 = -6 - 3$

$7 = -9$ no

2) (1,-5)?

$y = -2x - 3$

$-5 = -2x - 3$

$-2 = -2x$

$x = 1$

yes

3) (-2,1)?

$y = -2x - 3$

$y = -2(-2) - 3$

$y = 4 - 3$

$y = 1$

yes

Matt is 2 times as old as Alyssa. Represent this relationship in three ways - create a table, write an equation, and draw a graph.

Independent - Matt's Age (yrs)

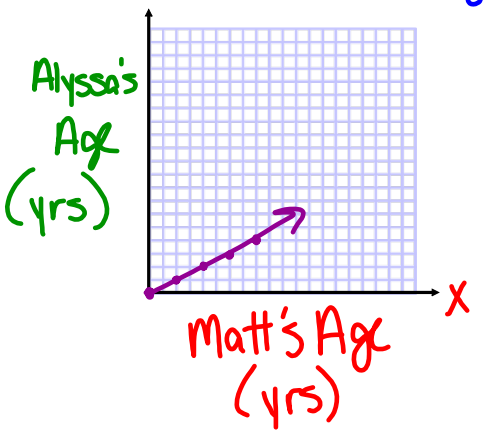
Dependent - Alyssa's Age (yrs)

Equation: Alyssa's Age $= \frac{1}{2}$ Matt's Age

$y = \frac{1}{2}x$

X	Y
0	0
2	1
4	2
6	3
8	4

The Effect of Matt's Age on Alyssa's Age



Solve.

$$-3(5k-5)=15-6k$$

$-15k+15=15-6k$

$+6k \qquad +6k$

$-9k+15=15$

$-15 \quad -15$

$-9k=0$

$k=0$

Solve.

$$\frac{1}{3}(12-6x)=4-2x$$

$4-2x=4-2x$

$4=4$

identity

Solve.

$$-3-3x=-3(7-3x)$$

$-3-3x=-21+9x$

$-3=-21+12x$

$\frac{18}{12}=\frac{12x}{12}$

$\frac{3}{2}=x$

Solve.

$$-32+8b=8(8+7b)$$

$-32+8b=64+56b$

$-32=64+48b$

$-96=48b$

$b=-2$

Solve.

$$2(g-2)-2=2(g-3)$$

$2g-4-2=2g-6$

$2g-6=2g-6$

$-6=-6$

identity

Assignment:

Solving Equations Review (both pages)

show ALL work