Mrs_Lewis_Tech Math A_ Period 4 Offsite_Learning_Packet_Day 8

Your name_____

Assignment # 8 Points 15

Tech Math Off-site Instruction Packet Cover Page (Periods 1,2,4)

Students, You can contact me with questions or just to say hi.

Email: LEWISJU@mwood.cc (Put your name in the subject line so I know who you are!!). I will be checking mail multiple times each day.

Topic of this assignment: 17.2 Substitution

What you need to know: This is a continuation of yesterday

What you need to do: See # 1 & # 7 Complete remaining problems 1-12

Suggested Youtube/Google search: "Solving systems of equations by substitution."

* Show work for full credit.

Name_____

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1) $-4x+3y=-7$
$-6x+y=7$ ← solve for y

$-6x+y=7$
$+6x \quad +6x$
$y=6x+7$
↓
plug into other equation

$-4x+3(6x+7)=-7$
$-4x+18x+21=-7$
$-21 \quad -21$
$14x=-28$
$x=-2$
↓
use in any equation to solve for y
$-6(-2)+y=7$
$12+y=7$
$y=-5$
$(-2,-5)$

2) $-3x+5y=11$
$-6x+y=-14$

3) $-2x-6y=14$
$x+4y=-10$

4) $x+2y=21$
$2x-2y=-6$



#8

5) $3x - 4y = 15$
$x - 3y = 5$

6) $x + 4y = 18$
$-2x - 3y = -11$

7) $3x + 2y = 11$
$5x + 8y = 23$

pick an equation & solve for 1 variable

$3x + 2y = 11$
$-3x \quad -3x$
$2y = -3x + 11$
$y = -\frac{3}{2}x + \frac{11}{2}$

substitute into other equation.

$5x + 8(-\frac{3}{2}x + \frac{11}{2}) = 23$

$5x - 12x + 44 = 23$
$-7x + 44 = 23$
$-7x = -21$
$x = 3$ use to solve y

$3(3) + 2y = 11$
$2y = 2$
$y = 1$

$(3, 1)$

8) $-4x + 2y = -8$
$-2x + 5y = -12$

9) $2x - 2y = 6$
$7x - 8y = 23$

10) $2x + 5y = -22$
$8x - 3y = 4$

11) $-6x - 7y = 12$
$-6x - y = -24$

12) $-4x - 5y = 3$
$-2x - 6y = -2$