Warm-Up-

Evaluate if $x = -3$

Ana C

1) $2x - 4$

$2(-3) - 4$

$-6 - 4$

$\boxed{-10}$

Henry

2) $\frac{2}{9}x + 4x$

$\frac{2}{9}(-3) + 4(-3)$

$-0.6 + -12$

-12.6

Fabio

3) $\frac{5x-1}{4+2x}$

$\frac{5(-3)-1}{4+2(-3)}$

$\frac{-16}{-2} = 8$

$\frac{-15-1}{4-6}$

Solve:

Land

4) $n - 3n = 14 - 4n$

$+3n \quad +3n$

$n = 14 - 1n$

$+1n \quad +1n$

$\frac{2n}{2} \quad \frac{14}{2}$

$n = 7$

Higor

5) $4n - 40 = 7(-2n + 2)$

$-14n + 14$

$18n - 40 \mid +14n$

$18n - 40 = 14$

$+40 \quad +40$

$18n = 54$

$\frac{18}{18} \quad \frac{18}{18}$

$n = 3$

System of Equations

We learned one method: Graphing ~~7~~

Next method is called: Substitution

Day 1

Scenario 1 is when both equations are solved for y= or x=

Ex 1

y = 2x y = 3x - 2

y = y

2x = 3x - 2

-3x -3x

-1x = -2

-1 -1

x = 2

-3x+2x=-2

-1x=-2

x=2

y = 3x - 2

y = 3(2) - 2

y = 6 - 2

y = 4

Solution (2, 4)

Ex 2 y = -2x + 19 y = x + 7

y = y

-2x + 19 = x + 7

-1x -1x

-3x + 19 = 7

-19 -19

-3x = -12

-3 -3

x = 4

-2 - 1 =

y = -2x + 19

y = -2(4) + 19

y = -8 + 19

y = 11

Solution (4, 11)

OR

y = x + 7

y = 4 + 7

y = 11

Ex 3 $y = \frac{-4}{5}x - 10$ y = -2x + 20

$5 \cdot \left(\frac{-4}{5}x - 10 = -2x + 20 \right)$

$5 \cdot (-4/5)$ $-4x - 50 = -10x + 100$

+10x +10x

$6x - 50 = 100$

+50 +50

$\frac{6x}{6} = \frac{150}{6}$

x = 25

y = -2x + 20

y = -2(25) + 20

y = -50 + 20

y = -30

Solution (25, -30)

WS

#1, 8, 5, 4

check-in w/ us

#2, 6, 10