Grab a Week #9 Packet
Bell Ringer

Monday 10/14

1) Solve the system using substitution.

$y = 3x$
$y = 5x - 8$

$3x = 5x - 8$
$-5x \quad -5x$
$\frac{-2x}{-2} = \frac{-8}{-2}$
$x = 4$

$(4, 12)$

2) Solve the system using substitution.

$y - 3x = -3$
$-2x - 4y = 26$

$y = 3x - 3$

$-2x - 4(3x - 3) = 26$
$-2x - 12x + 12 = 26$
$-14x + 12 = 26$
$-12 \quad -12$
$\frac{-14x}{-14} = \frac{14}{-14}$
$x = -1$

$(-1, -6)$

5.1 online hw due today!

5.2 online hw due tomorrow!

Week #8 Packet due tomorrow!

Ch 4 Test Retake due Tues 10/29

$x - 3y = -1$

$x = y$

$y - 3y = -1$

$-2y = -1$

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

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

$\left(\frac{1}{2}, \frac{1}{2}\right)$

$x - 3x = -1$

$-2x = -1$

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

$2x + 2y = 10$

$y = 5 + x$

$2x+2(5+x)=10$

$2x+10+2x$

$4x+10=10$

$-10 \quad -10$

$\frac{4x}{4} = \frac{0}{4}$

$x = 0$

O/S :

An adult ticket to a museum costs $3 more than a children's ticket. When 200 adult tickets and 100 children's tickets are sold, the total revenue is $2100. What is the cost of a children's ticket?

$8 $5

x = adults price

y = childrens price

$x = y + 3$

$200x + 100y = 2{,}100$

$200(y+3) + 100y = 2{,}100$

$200y + 600 + 100y = 2{,}100$

$300y + 600 = 2100$

$-600 \quad -600$

$\frac{300y}{300} = \frac{1500}{300}$

$y = 5$

$3x + y = -5$

$y = 2x + 5$

$(-2, 1)$

$2x + 6y = 2$

$-3x - 3y = -15$

$x + 3y = 1 - 3y$ $\quad x = 1 - 3(-2)$

$-3y \quad\quad 1 - (-6)$

$1 + 6$

$-3(1 - 3y) - 3y = -15$

$-3 + 9y - 3y = -15$

$+3 \quad +3$

$\frac{6y}{6} = \frac{-12}{6}$

$y = -2$

$(7, -2)$

There are a total of 64 students in a drama club and a yearbook club. The drama club has 10 more students than the yearbook club. Write a system of linear equations that represents this situation. How many students are in each club?

Math 1 Honors Name_____

Solving Systems Using Substitution - Day 2

Date_____ Hour____

Solve each system by substitution.

1) $-2x - 4y = 8$
$y = -2$

2) $7x - 3y = 2$
$y = -3$

3) $y = -2x - 2$
$8x + 2y = -12$

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

5) $y = 8x - 5$
$y = 4x - 1$

6) $y = x - 4$
$y = -6x + 24$

7) $-x - y = -5$
$y = 1$

8) $-3x + 8y = -15$
$-3x + y = 6$

9) $-x - 5y = -19$
$x - 7y = -17$

10) $3x + 6y = 15$
$y = 4$

11) $-2x + 5y = -10$
$-7x + y = -2$

12) $3x + y = 8$
$6x + 4y = 20$

13) $-7x - 7y = -21$
$4x + y = 6$

14) $x - 4y = 3$
$2x - 4y = 2$

15) $-6x - y = -13$
$2x + 2y = -4$

16) $-2x - 5y = 20$
$y = -4$