Solve each system by elimination.

Feb 12

8) $2x + 7y = -26$ ×5
$10x + 10y = -30$

$-10x - 35y = 130$

$10x + 10y = -30$

$-25y = 100$

$\frac{-25}{-25} = \frac{100}{-25}$

$y = -4$

LS	RS
$10x + 10y$	-30
$10(1) + 10(-4)$	
$10 - 40$	
-30	✓

POI
$(1, -4)$

substitute 1

$2x + 7y = -26$

$2x + 7(-4) = -26$

$2x - 28 = -26$

$+28 \quad +28$

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

$x = 1$

Solve each system by elimination.

11) $3x - 6y = 12$
$x - 12y = 4$

$3x - 6y = 12$

$x(-3) \rightarrow -3x - 36y = -12$

$+$

$-42y = 0$

$\frac{-42y}{-42} = \frac{0}{-42}$

$y = 0$

Substitute to find "x"

$3x - 6y = 12$

$3x - 6(0) = 12$

$\frac{3x}{3} = \frac{12}{3}$

$x = 4$

L.S	R.S
$x - 12y$	4
$4 - 12(0)$	

POI $(4, 0)$

1) Norachai and Nicole each improved their yards by planting rose bushes and shrubs supplies from the same store. Norachai spent $208 on 14 rose bushes and 8 shrubs on 7 rose bushes and 6 shrubs. Find the cost of one rose bush and the cost of one s

Let x = cost of rose bush

then y = cost of shrub

(1) $14x + 8y = 208 \rightarrow 14x + 8y = 208$

$7x + 6y = 128 \quad \times(-2) \quad -14x - 12y = -256$

find x in (1)

$14x + 8y = 208$

$14x + 8(12) = 208$

$14x + 96 = 208$

$-96 \quad -96$

$\frac{14x}{14} = \frac{112}{14}$

$x = 8$

$-4y = 48$

$\frac{-4y}{-4} = \frac{48}{-4}$

$y = 12$

8 roses cost $8.00

4 shrubs cost $12.00

2) Mike and Ashley each improved their yards by planting grass sod and shrubs. The supplies from the same store. Mike spent $65 on 8 ft² of grass sod and 1 shrub. As ft² of grass sod and 10 shrubs. Find the cost of one ft² of grass sod and the cost of

Let x = cost of 1 ft^2 grass sod

Then then y = cost of shrub

$8x + y = 65$

$y = -8x + 65$

get y by itself

$4x + 10y = 118$

$4x + 10(-8x + 65) = 118$

$4x - 80x + 650 = 118$

$-76x = -532$

$x = 7$