NAME_____**DATE**_____**PER.**_____

SOLVING SYSTEMS OF EQUATIONS BY MATRICES – Day 2

Solve the system of equations.

1. A movie theatre sells tickets for $8.00 each and senior tickets for $6.00 each. One evening the theater sold 525 tickets and took in $3580 in revenue. How many of each type of ticket were sold?

Define variables:

Equation: _____

Equation: _____

Solution:_____

2. During one month, a homeowner used 400 units of electricity and 120 units of gas for a total cost of $73.60. The next month, 350 units of electricity and 200 units of gas were used for a total cost of $72. Find the cost of a unit of gas.

Define variables:

Equation: _____

Equation: _____

Solution:_____

3. Xavier has 51 coins in nickels and dimes, and has $4.15 in all. How many of each does he have?

Define variables:

Equation: _____

Equation: _____

Solution:_____

4. The length of a rectangle is four times the width. If the perimeter is 30 cm, what are the dimensions of the rectangle?

Define variables:

Equation: _____

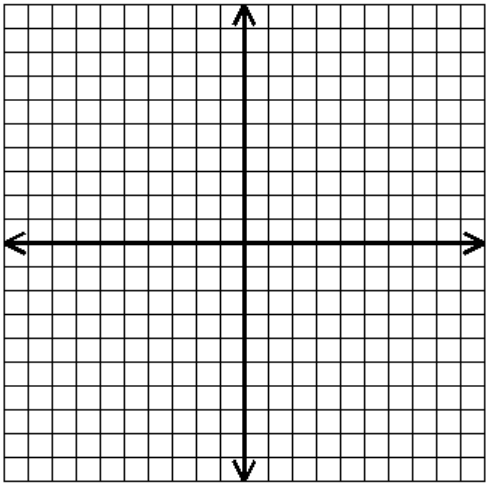
Equation: _____

Solution:_____

Solve each system by graphing, #5 by hand & #6 in the calculator (draw a sketch).

5. -2x – 1 = y

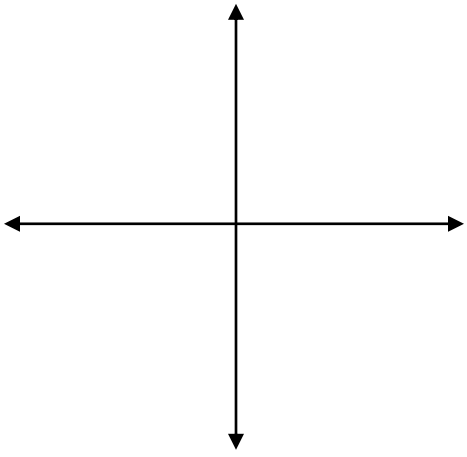
x + y = 3



Solution:_____

6. 2x = -y + 3 y_1 = _____

3y = x – 12 y_2 = _____



Solution:_____