1. The junior class is selling candy bars to raise money. They have milk chocolate bars and white chocolate bars to sell. They have 550 candy bars total. They are selling the milk chocolate bars for $1.50 and the white chocolate bars for $1. They need to make $750 in two days. Write equations to model this situation.

2. Solve the following system of equations.
$$y = 5 - 4x$$
$$3x - 2y = 12$$

3. Lisa's bank charges a monthly fee of $12.00 for her checking account. The monthly fee allows her to write 50 checks. After 50 checks, she is charged $0.25 for each additional check she writes. What will be Rosa's total monthly charge if she writes 75 checks in one month?

   A $6.25   C $18.75

   B $18.25   D $30.75

4. Write the matrix that results when a scalar multiplier of 4 is applied to the matrix below?

$$\begin{bmatrix} 4 & 2.5 \\ -\dfrac{3}{4} & -0.4 \end{bmatrix}$$

5. Maria has $600.00 and will be spending $25.00 every week. Michael has no money now but will be saving $50.00 each week. If they start spending and saving on the same day, in how many weeks will they have the same amount of money?

6. Super Shine Car Wash pays its employees $250.00 each week plus $1.50 for each car they wash. Write a function rule that best models the relationship between an employee's pay for one week (*p*) and the number of cars washed (*c*)?

7. Charge-A-Lot Cell Phone Company offers a rate plan that has a $45.00 monthly fee plus $0.10 for every minute of talk time. Which table best models this offer? _____

A

Minutes	Process	Charge
0	45+0	45
5	45+0.10(5)	45.50
10	45+0.10(10)	46
15	45+0.10(15)	46.50

C

Minutes	Process	Charge
0	45(0)+0.10	0.10
5	45(5)+0.10	225.10
10	45(10)+0.10	450.10
15	45(15)+0.10	525.10

B

Minutes	Process	Charge
0	45+0	45
5	45+0.10(1)	45.10
10	45+0.10(2)	45.20
15	45+0.10(3)	45.30

D

Minutes	Process	Charge
0	45(0)+0.10	0.10
5	45(1)+0.10	45.10
10	45(2)+0.10	90.10
15	45(3)+0.10	135.10

8. A theater sold 900 tickets to a play. Floor seats cost $12 each and balcony seats $10 each. Total receipts were $9780. How many of each type of tickets were sold?

a. Write a system of equations using *x* and *y* to model this situation.

b. In your system of equations, *x* represents _____ and *y* represents

_____

c. Solve the system. The solution is _____.

d. Interpret the results. _____

_____

9. Robert counted the money in his coin jar. He discovered that he had a total of $10.75 in dimes, nickels and quarters. There are twice as many nickels as dimes. There were a total of 98 coins. Write a system of equations and solve it using inverse matrices on the graphing calculator.