I.   Graph

$3x-2y= -6$ $y=x^2+4x -2$

II.   Solve by graphing

$Y > 3x-6$

$Y \le -2x+4$

III.   Mr. Miller purchased a car in 2005 for $25,000. In 2017 the car is worth $5,000. Write a linear equation to model the cost of the car for any year. Let x=0 represent the year 2005. How much will the car cost in 2018?

IV.   Find the probability of event given a standard deck of 52 cards. (No jokers)

a. P(5)
b. P(face card)
c. P(Blue card)
d. P(3 or 7)

V.   Find the probability of each event, WITHOUT REPLACEMENT, if a bag of marbles contains 6 blue, 4 red, 8 green and 2 yellow.

a. P(blue and then red)
b. P(green and green and yellow)

VI.   Draw and properly label a normal distribution curve with the correct percentages.

VII.   Use the information in the chart to predict the population of North Carolina in the year 2020. Assume a linear model and let x=0 represent 1960.

Year	Population(millions)
1960	4.5
1970	5.0
1980	5.8
1990	6.6
2000	8.0
2010	9.5

      VIII.   Use the diagram below and follow my directions.

      IX.   Find the value of each.

        a. $_7C_2$

        b. $_8P_4$

        c. 2(6-1)!

        d. 2^4-1

        e. $_8C_3(1/4)^3(3/4)^5$

        f. .72 ± 2√.72(1-.72)

      X.   Find the sum of the series

$$\sum_{n=1}^{10} 2x - 3$$

$$\sum_{n=1}^{5} 3^{n-1} + 4$$

      XI.   Expand any way you know how.

$(2x+5)^4$