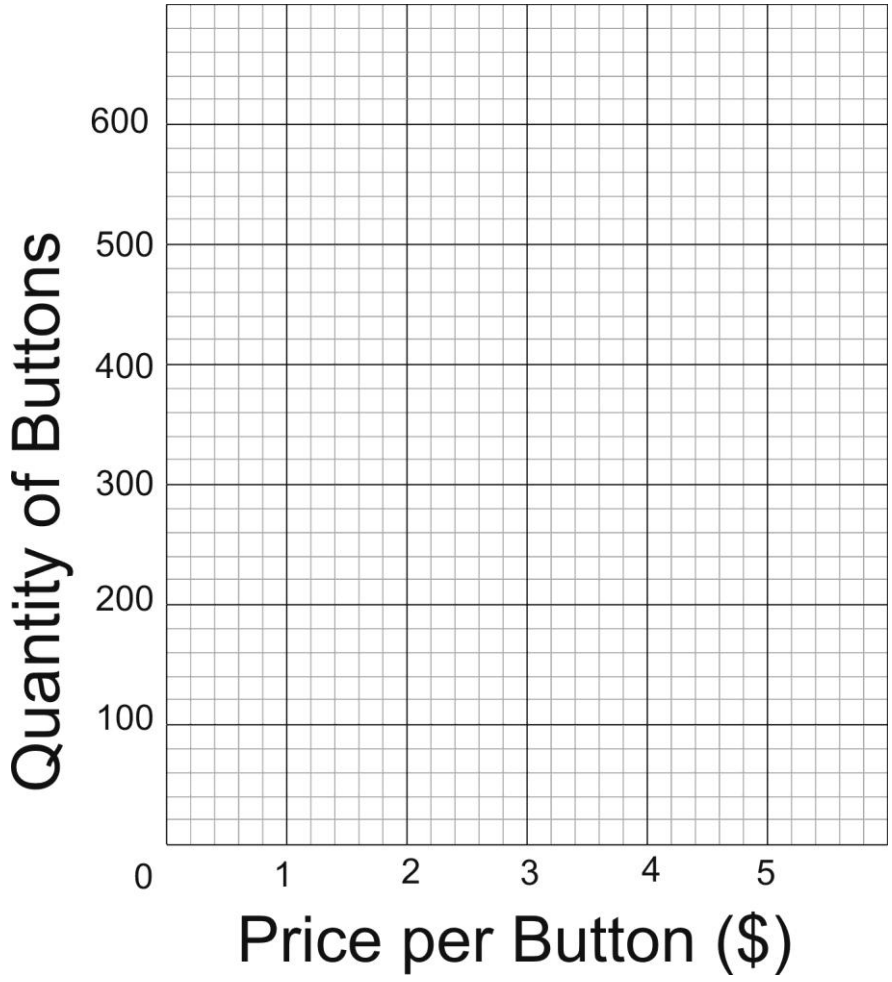
# Activity Sheet 1
# Senior Class Buttons

NAME _____

DATE _____

Esteban has an idea that could raise money for the senior class. He would like to sell buttons commemorating his graduating class.

| SELLING PRICE OF EACH BUTTON | NUMBER OF BUTTONS IN STOCK (SUPPLY) | NUMBER OF BUTTONS THAT STUDENTS WILL BUY (DEMAND) |
|---|---|---|
| $1.00 | 35 | 530 |
| $2.00 | 130 | 400 |
| $4.00 | 320 | 140 |




1. Plot points representing supply for each price in the table. Draw the line through the data points, and write *Supply* on this line.

2. Plot points representing the number of buttons requested (demand) for each selling price on the same graph. Draw the line through these points. Label this line *Demand*.

## Using Your Graph

**3.** If Esteban sets the price at $2.50 per button, how many disappointed customers can he expect to have? Show or tell how you got your answer.

**4.** If Esteban sets the price at $3.80 per button, how many unsold buttons can he expect to have left over? Show or tell how you got your answer.

**5.** If Esteban gives the buttons away at no charge, how many buttons would he need? How does the graph help you determine your answer?

**6.** What price would make the button supply so low that the number of available buttons would be zero? How does the graph help you determine your answer?

**7.** Estimate the price at which supply and demand will be in equilibrium. What is this price and how many buttons can Esteban expect to sell? How does the graph help you determine your answer?

## Using Equations

**8.** Use your graph to find the equation for supply (S) as a function of price (P).

**9.** Use your graph to find the equation for demand (D) as a function of price (P).

**10.** Solve the system of supply-and-demand equations to find the price and the number of buttons that Esteban should order for supply and demand to be in exact equilibrium. How does this price compare with your answer in Question 7?