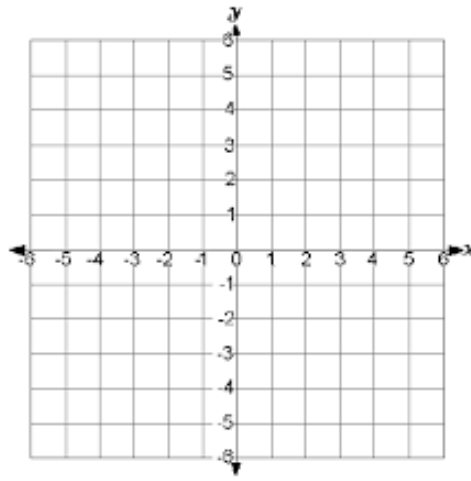


Explorations in Core Math

Short Answers (5 pts each)

1. Solve the system by graphing.

$$\begin{cases} y = -\frac{2}{3}x + 2 \\ 8x + 3y = -12 \end{cases}$$



2. Solve the system using the substitution method.

$$\begin{cases} x - 2y = -3 \\ 3x + 7y = 4 \end{cases}$$

3. Solve the system using the elimination method.

$$\begin{cases} -4x + 10y = -8 \\ 2x - 7y = 12 \end{cases}$$

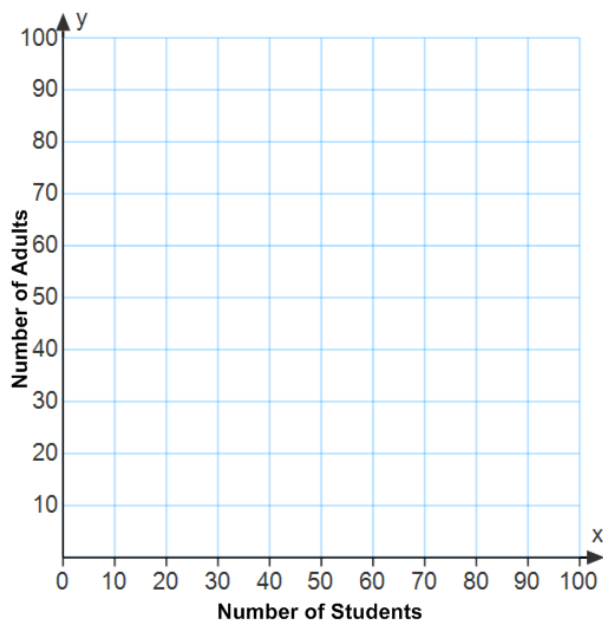
Explorations in Core Math

Constructed Response (10 pts)

1) The Bulldog track team is putting on a talent show for a fundraiser. They sold student tickets for \$10 each and adult tickets for \$20 each. It was unknown how many of students and adults came to the talent show. The students do know that a total of 70 people were in attendance and they made a total of \$1000 with ticket sales. Let x represent the total number of students that attended and y represents the total number of adults that attended.

- a) Write a system of linear equations (in standard form) that represents this situation. (3 pts)
HINT: one equation should represent the attendance at the play and one equation should represent the amount of money made at the play.

- b) Graph the system of equations. (5 pts)



- c) How many students (x) came to the play and how many adults (y) came to the play? Check your work. (2 pts)