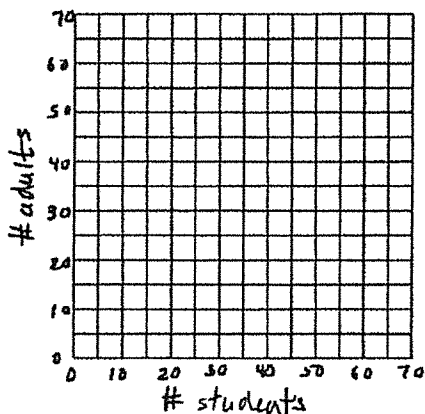


1. Our Algebra 1 class decides to take a field trip to see Vin Diesel's new movie, "Faster and Furiouser," but we have to fit all of the students and chaperones onto one bus, which can only seat 30 people. We also only have \$100 with which to buy tickets. An adult ticket costs \$10 and a student ticket costs \$2.

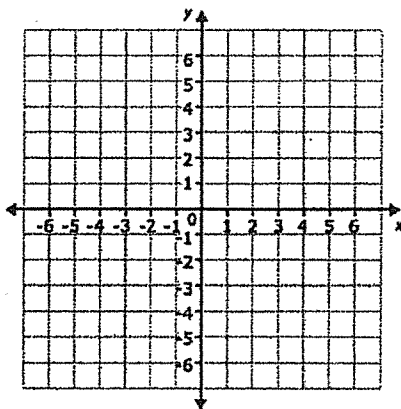
a) Let x be the number of students and y be the number of adults on the field trip. Write a system of inequalities that describes this situation.

b) Graph this system.



c) List three possible solutions to the number of adults and the number of students that could come on the field trip.

2. Write a system of two inequalities for which the points $(2,3)$ and $(3,2)$ are solutions to both inequalities, and the points $(-2,-3)$ and $(-3,-2)$ are not a solution to either inequality. You can use the blank graph below to help you.



3. Dee has at most \$150 to spend on restocking dolls and trains in her toy store. Dolls cost \$7.50, and trains cost \$5.00. Dee needs no more than 10 trains, and at least 8 dolls. Graph all possible combinations of dolls and trains that Dee can buy. (Hint: Let x be the number of dolls and y be the number of trains.)

