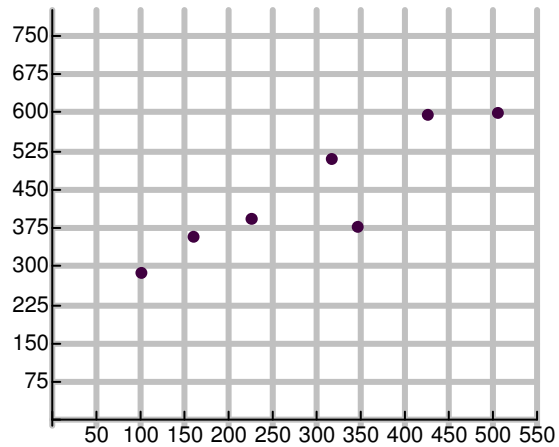


The table and graph below show the number of high school students in different states and the average number of absences per week.

State	Students (thousands) (x)	Absences (y)
Illinois	100.3	290
Indiana	159.7	360
Florida	225.2	395
Wisconsin	315.79	510
Idaho	346.21	381
California	426.0	598
Michigan	503.9	603



- 1) Does the relationship represent a function? *Explain* your answer.
- 2) Draw a line-of-best fit on the graph above.
- 3) Write down the coordinates of 2 *grid* points on your line.
- 4) Use your 2 points to calculate the slope $\left(\frac{y_2 - y_1}{x_2 - x_1}\right)$ of your line-of-best fit.
Round to the nearest tenth, if necessary.
- 5) Use your slope and one of your points to calculate the equation of your line-of-best-fit.
Write your final equation in slope-intercept ($y = mx + b$) form.

Define variables and write a system of equations to represent the following situation and solve.

A total of 400 students and adults are expected to attend Friday night's football game. Student tickets cost \$2 each, and adult tickets cost \$3.50 each. The school raises \$1055 from ticket sales. How many student and how many adult tickets were sold?

6) Define your variables.

7) Write a system of two equations to represent the situation.

8) Solve your system of equations.

9) Answer the question.

Define variables and write a system of equations to represent the following situation and solve.

You buy 200 decorations for a party and spend \$56.13. Balloons cost \$.12 each and streamers cost \$.75 each. How many balloons and how many streamers do you buy?

10) Define your variables.

11) Write a system of two equations to represent the situation.

12) Solve your system of equations.

13) Answer the question.