Sugar Water and Density Relationship

1. Write down the mass of your empty graduated cylinder and record it all the way down the table.
2. Fill graduated cylinder to exactly 50 ml using the pipette, using one of the bottles of premade solution.
3. Take the mass of the cylinder with liquid in it and liquid and record.
4. Calculate the density
5. Pour contents of graduated cylinder down the drain, rinse, and complete the above for other masses of sugar.
6. Make a dot graph of your data. Place density on the y-axis and mass of sugar per 100 ml of solution on the x-axis.
7. Draw in a "Line of Best Fit" using your data points.

Mass of Sugar Used per 100ml of solution	Mass of Graduated Cylinder and liquid	Mass of empty Graduated cylinder	Mass of liquid	Volume of liquid	Density of liquid (2 numbers after decimal)
0g				50ml	
5g				50ml	
10g				50ml	
15g				50ml	
20g				50ml	

8. Determine the density of Unknown A, Unknown B, and Unknown C and use your line of best fit to make a prediction of how many gram of sugar per 100ml of water this solution contains.

Unk A _____ Unk B _____ Unk C _____