1. The following question covers many of the topics covered in chemistry 112 that are necessary for chemistry 122. Show ALL work and state final answers with the appropriate unit and level of precision.

A scientist mixes 10.5 g of iron (III) sulfate with 12.1 g of barium chloride.

* 1. Predict the products of the reaction above.
	2. Identify the precipitate formed using Table B.9 on page R54 of the text book.
	3. Balance the equation
	4. Determine the theoretical yield of precipitate.
	5. Determine the percent yield if they actually produced 6.25 grams of precipitate.

The following questions require the use of math skills you should have acquired at this point. These skills will be used under the context of chemistry in this course. For each question, solve to find the values of x and y.

1. a) $5=\frac{4x}{3}$

b) $\frac{4}{3y-1}=18$

c) $y-3x-4=0$

$$2x-3y+7=0$$

d) $37=y∙y^{2}$

d) $50=x^{3}∙\left(\frac{2}{3}x\right)^{2}$