Section 2.5 – To Reason

Owen has been a chemist for three and a half years. He is creating an explosive solution.

To cause an explosion, he must mix 2 liquids.

- He takes a test tube full of yellow liquid and pours out $\frac{2}{3}$ of its contents.
- Then, he takes a test tube full of green liquid, pours out $\frac{4}{9}$ of its contents and pours the rest into the first test tube.

The test tube containing both liquids must be at least $\frac{13}{18}$ full for the solution to explode.

Will the solution explode? Explain your answer.