MATH 402 Non-Euclidean Geometry
Reflection paper 2 topics

Address Exercise 1.5.2 from the book: Two important philosophies of mathematics are those of the platonists and the intuitionists. Platonists believe that mathematical ideas actually have an independent existence and that a mathematician only discovers what is already there. Intuitionists believe that we have an intuitive understanding of the natural numbers and that mathematical results can and should be derived by constructive methods based on the natural numbers, and such constructions must be finite.

Of the four main philosophies of mathematics – platonism, formalism, logicism, and intuitionism – which most closely matches the way you view mathematics? Which is the prevalent viewpoint taken in the teaching of mathematics?

Hint: Search the pdf file of the book to find all occurrences of the words *platonism, formalism, logicism, and intuitionism* (as well as their grammatical relatives, like formalist, etc.) and read the paragraphs that contain them. Further research these terms to make sure you understand what they mean. For example, Wikipedia has entries on all of them.