Inquiry-based learning has been widely used as a teaching and learning tool in developing students’ critical thinking skills. While mathematics is perceived as one of the most abstract subjects, actuarial science is an excellent outlet for applying mathematical theories to exploring and solving real life problems. Therefore, the inquiry-based mathematical teaching proves to be a really important part of these courses. In this paper, the author will use some examples in core actuarial courses, such as Probability and Financial Mathematics, to illustrate the methods of teaching students to ask and explore mathematical questions in actuarial science classes.

(Received September 13, 2014)