Abstract

This paper describes how motivation can trigger the search for mathematical knowledge. The research field was the set of attitudes and abilities shown by students at a Linear Algebra course taken in preparation for a Control Theory course, a sub-part of the Systems Engineering program. A geometrical approach was used to discuss linear algebra. Thanks to Scilab, a computer-based application, successive trials led to the discovery of specific properties. The rapidity of Scilab’s numeric response made it possible to use a search process of error and success which manual methods do not address at that level.