

Pompoms and Calculations

Deja Young

Practical Applications of Advanced Mathematics

Summer Ventures Science and Mathematics

University of North Carolina Charlotte

Mrs. Amy Goodrum & Mrs. Anna Hunt

Abstract

“Pompoms and Calculations” is about finding mathematics in cheerleading. A survey was taken to find out what people thought about mathematics in cheerleading. Physics was the most common type of mathematics thought to be involved with cheerleading which has been proven true. In this research paper, there is a comparison between the physics of two different cheerleading stunts: toe touch basket toss which is 180° and arabesque which is 90° . While researching the physics of these stunts, it was found that when changing the geometry of the stunts the physics will also change. The work done in a toe touch basket toss stunt is greater than the work done in an arabesque (90°).