

# Sharis Sohcahtoa

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The machine will help learners with hearing impairment to read cosines, sines and tangents of an angle at the same time to improve mathematical performance in special schools (schools for the deaf) and also to make them have a sense of belonging in the society. In constructing this machine, it involves folding the R8 wire to form a unit circle shape and degrees are measured at an interval of 10 degrees, measured and marked. Circle formed will be placed on the board and a Cartesian plane is drawn inside the circle, fix the R8 wire using nails and connect with the bulbs and the battery. When reading, the pointer should pass through the center so as to complete the circuit hence making the bulb to light. We tested the work-ability of the SHARIS machine and realized that with the help of the machine the students were able to answer the questions correctly and faster. We visited Kapsabet school for the deaf (one of the special schools in our locality) to pilot on the work-ability of our project. We collected our data from there. We do believe that we have done our best in helping the deaf to do well in mathematics. We have done an inclusion of those with hearing impairment in the society. We recommend for further improvement in this project and thereafter be approved by the ministry to be used as a teaching aid in Kenyan secondary schools and other special schools in the world.