



# Portable math lab.

KE196

## Function

Intended for experimental study, mathematics laboratory and carrying out mathematical experiments on: theory of errors and measurements in general, angular properties of triangles, fundamental trigonometric relations in a right triangle, ratio, Pythagoras' theorem, metric relation between the sides of a right triangle, law of sines and cosines in a right triangle, external and internal volumes and of the walls of hollow geometric solids, relations between the angles formed by parallel lines cut by a transversal line, measurements, angles, inclination, metric relations in the right triangle, trigonometric relations in the right triangle, indirect measurement of heights, plane geometry, degree, radian, quadrants, sine, cosine, tangent, trigonometric circle, Pythagoras' theorem, etc.

## Knowledge areas

Mathematics

## Level

High School - Elementary Education

## Key Experiments

Significant figures and uncertainties. - 1032.003\_0

Measuring the height of a distant object, the clinometer. - 1400.240

Measuring the internal volume of a cubic shape. - 1400.010A

## **Mathematics - Algebra - Trigonometry**

The angular properties of triangles. - 1400.025

The fundamental trigonometric relations of the right triangle. - 1400.030

Pythagoras' theorem, a metric relationship between the sides of a right triangle. - 1400.035

The law of sines and cosines in a right triangle. - 1400.040

The degree, the radian, the quadrants and their conversions. - 1072.006T\_A

The sine in the trigonometric circle, sinusoidal function. - 1072.006T\_B

The cosine in the trigonometric circle. - 1072.006T\_C

The tangent in the trigonometric circle. - 1072.006T\_D

The fundamental relationship of trigonometry in the trigonometric circle. - 1072.006T\_E

The relationships between the angles formed by parallel lines cut by a transversal. - 1400.020

## **Mathematics - Geometry - Spatial Geometry**

Area of the regular hexahedron, the cube. - 1400.006A

The external, internal and wall volumes of a hollow cube. - 1400.008

## **Mathematics - Geometry - Metric Geometry**

Area of the regular hexahedron, the cube. - 1400.006A

The external, internal and wall volumes of a hollow cube. - 1400.008

The regular straight and irregular pyramids, the area of the regular straight pentagonal pyramid. - 1400.006D

The area of the right circular cylinder. - 1400.006H

## **Mathematics - Geometry - Plane Geometry**

The regular straight and irregular pyramids, the area of the regular straight pentagonal pyramid. - 1400.006D

The area of the right circular cylinder. - 1400.006H

**cidepedigital.com.br** ✉ **cidepe@cidepe.com.br**

---

Victor Barreto Ave, 592 - Zip Code 92010-000 - Canoas - RS - Brazil