

Size of the earth

Erathostenes worked the circumference of the earth correctly over 2,000 years ago. Can you do it?

At midday the sun shone straight down a deep well at Syene, in South Egypt. At the same time a stick 10m high cast a shadow 1.26m long indicating that the sun's rays were $7^{\circ} 15'$ from the vertical. That angle is one fiftieth of 360° . The stick was at Alexandria, 800 Km due North of Syene.