Group name

Date

Time

**CALCULATING THE CIRCUMFERENCE OF THE EARTH**

**Circumference = 360 x distance to equator / angle**

**C = 360 x D/A**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Trial** | **height of stick (mm)** | **length of shadow (mm)** | **Shadow/stick** | **Tan-1(Stick/Shadow)** | **A = Protractor Angle** | **D (km)** | **C= 360xD/A (km)** | **% error**  **(C/real\_C)\*100** |
| **1** |  |  |  |  |  | 2970.82 |  |  |
| **2** |  |  |  |  |  | 2970.82 |  |  |
| **3** |  |  |  |  |  | 2970.82 |  |  |
| **average** |  |  |  |  |  |  |  |  |

How accurate is your measurement?

What are the sources of error?

What if you repeated this experiment at different times of the year?