Surface area Calculator

Objective:

Using the input of the user, calculate the total surface area of a 3D shape.

Complexity level:

* Easy

Scenario:

* John Doe is a student.
* The student wants to calculate the surface area of a shape for his math homework.

Problem statement

1. Write an algorithm to calculate the area of a sphere (taking the input of the user for the radius) (test with radius= 2.5 inches).
2. Write an algorithm to calculate the area of a cube (test with side length 4 ft).
3. Write an algorithm to calculate the area of a cone (test with height = 5 in, radius = 2 in).
4. Write an algorithm to calculate the area of a rectangular prism (l, w, h = 4, 7 15 ft).

Expectation outcomes:

Practice gathering user input and calculating simple mathematical functions.

Reference URL:

1. <http://fredrickey.info/hm/CalcNotes/schwarz-paradox.pdf> .
2. <http://mathdl.maa.org/images/upload_library/22/Polya/00494925.di020678.02p0385w.pdf> .
3. Rorres, Chris. ["Tomb of Archimedes: Sources"](http://www.math.nyu.edu/%7Ecrorres/Archimedes/Tomb/Cicero.html). Courant Institute of Mathematical Sciences. Retrieved 2007-01-02.