Zadanie 11  
Krzysztof Kozubek(c++)

**WYNIKI:**

wymiar 0: objetosc kuli = 1

wymiar 1: objetosc kuli = 1

wymiar 2: objetosc kuli = 0.785339

wymiar 3: objetosc kuli = 0.523326

wymiar 4: objetosc kuli = 0.308287

wymiar 5: objetosc kuli = 0.164729

wymiar 6: objetosc kuli = 0.081382

wymiar 7: objetosc kuli = 0.037122

wymiar 8: objetosc kuli = 0.015808

wymiar 9: objetosc kuli = 0.006445

wymiar 10: objetosc kuli = 0.002507

**Kod programu:**

#include<iostream>

#include<cstdlib>

#include<cmath>

using namespace std;

long int precision = 1000000;

double from0To1(){

double result = (rand() % 100) ;

return result / 100;

}

double circuitSphere(int size)

{

long int trueShot = 0;

for (long int i = 0; i< precision; i++)

{

double vLenght = 0;

for (int z = 0; z< size; z++)

{

double random = from0To1();

vLenght += (random - 0.5)\*(random - 0.5);

}

vLenght = sqrt(vLenght);

if (vLenght <= 0.5){trueShot++; }

}

return trueShot \* 1.0 / precision;

}

int main(){

for (int i = 1; i < 11; i++)

cout << "wymiar " << i << ": objetosc kuli = " << circuitSphere(i) << endl;

system("pause");

return 0;

}