

# Solution Review: Calculate the Area of the Sphere

Let's go over the solution review in this lesson.

## We'll cover the following ^

- Solution
- Explanation

## Solution #

```
#include <iostream>
using namespace std;

int main() {
    // Initialize a variable r
    double r = 10.1;
    // Prints value of r
    cout << "r = " << r << endl;
    // Initialize a constant pi
    const double pi = 3.14;
    // Declares a variable area
    double area;
    // Find the area using a given formula
    area = 4*pi*r*r;
    // Prints value of area
    cout << "area = " << area;
}
```



## Explanation #

**Line No 6:** Since `r` can have floating-point values, the data type of `r` is `double`

**Line No. 10:** Creates a constant `pi` whose data type is `double`

**Line No. 12:** Declares a variable `area` of type `double`

**Line No. 14:** The following line is written to calculate the `area` :

```
area = 4*pi*r*r;
```

Let's wrap up this chapter by completing a a quiz in the upcoming lesson.