

- **Object-oriented programming (OOP)** –
a programming paradigm that uses abstraction to create models based on the real world. It utilizes several techniques from previously established paradigms, including modularity, polymorphism, and encapsulation.
- *To be object oriented, a language must support*
 1. Encapsulation
 2. Inheritance
 3. Dynamic Binding

© Dr Izeddin Hidar 2007

- **Class** - defines the abstract characteristics of a thing, including the thing's characteristics (its **attributes** or **properties**) and the things it can do (its **behaviors** or **methods** or **features**).
- To add a class to your project
 - open Project\Add Class.
 - Select class icon , Write the appropriate name as “Rectangle” and press Ok

© Dr Izeddin Hidar 2007

```
using System;
using System.Collections.Generic;
using System.Text;

namespace Example3_1
{
    class Rectangle
    {
    }
}
```

© Dr Izeddin Hidar 2007

3.1 Math Class Methods

- Math class methods allow the programmer to perform certain common mathematical calculations. We use various Math class methods to introduce the concept of methods in general.
- Methods are called by writing the name of the method, followed by a left parenthesis, the argument (or a comma-separated list of arguments) of the method and a right parenthesis.
- The parentheses may be empty, if we are calling a method that needs no information to perform its task.
- For example, a programmer wishing to calculate and print the square root of 9.0 might write
`double y= Math.Sqrt(9.0);`

© Dr Izeddin Hidar 2007