public abstract class Shape

{

protected Shape(string name)

{

Name = name;

}

public string Name { get; }

public virtual string GetName()

{

return "Shape: " + Name;

}

public abstract double GetArea();

}

public class Triangle : Shape

{

private double side;

private double height;

public Triangle(string name, double side, double height) : base(name)

{

this.side = side;

this.height = height;

}

public override double GetArea()

{

double area = (side \* height) / 2;

return area;

}

}

public class Circle : Shape

{

private double radius;

public Circle(string name, double radius) : base(name)

{

this.radius = radius;

}

public override double GetArea()

{

double area = radius \* radius \* Math.PI;

return area;

}

}

public class Rectangle : Shape

{

private double side1;

private double side2;

public Rectangle(string name, double side1, double side2) : base(name)

{

this.side1 = side1;

this.side2 = side2;

}

public override double GetArea()

{

double area = side1 \* side2;

return area;

}

}

public class Square : Rectangle

{

private double side1;

public Square(string name, double side1, double side2) : base(name, side1, side2)

{

this.side1 = side1;

}

public override double GetArea()

{

double area = side1 \* side1;

return area;

}

}