```
// Using run-time polymorphism.
class Figure {
	double dim1;
	double dim2;
	Figure(double a, double b) {
		dim1 = a;
		dim2 = b;
	}
	double area() {
		System.out.println("Area for Figure is undefined.");
		return 0;
	}
}

class Rectangle extends Figure {
	Rectangle(double a, double b) {
		super(a, b);
	}
	// override area for rectangle
	double area() {
		System.out.println("Inside Area for Rectangle.");
		return dim1 * dim2;
	}
}

class Triangle extends Figure {
	Triangle(double a, double b) {
		super(a, b);
	}
	// override area for right triangle
	double area() {
		System.out.println("Inside Area for Triangle.");
		return dim1 * dim2 / 2;
	}
}
```

```
class FindAreas {
        public static void main(String args[]) {
                Figure f = new Figure(10, 10);
                Rectangle r = new Rectangle(9, 5);
                Triangle t = new Triangle(10, 8);

                Figure figref;
                figref = r;
                System.out.println("Area is " + figref.area());
                Figref = t;
                System.out.println("Area is " + figref.area());
                figref = f;
                System.out.println("Area is " + figref.area());
        }
}
```

The output from the program is shown here:

```
Inside Area for Rectangle.
Area is 45
Inside Area for Triangle.
Area is 40
Area for Figure is undefined.
Area is 0
```