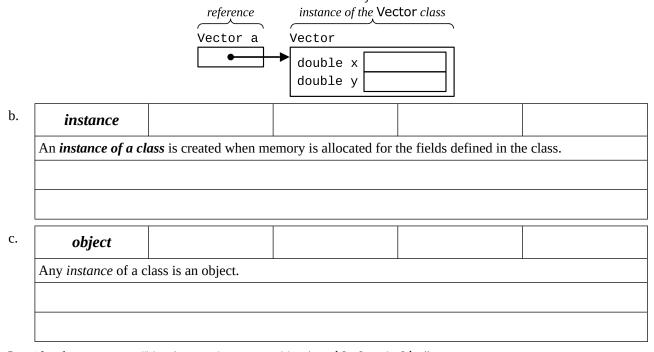
class identifier public class Vector { Vector public double x; public double y; +x: real fields / attributes +y: real +Vector(x: real, y:real) public Vector(double x, double y) { +add(v: Vector) this.x = x; this.y = y; } methods / operations public void add(Vector v) { this.x += v.x; this.y += v.y; } }

The diagram immediately below has an example class labelled with important vocabulary.

1. Copy each vocabulary word repeatedly into the boxes to the right of it, then copy each definition once into the box(es) below it. Make sure you understand each definition.

| ì. | class | | | | |
|----|---|--|--|--|--|
| | A <i>class</i> is a description of how to create an object. | | | | |
| | | | | | |
| | A <i>class</i> defines the state (fields) and the behavior (methods). | | | | |
| | | | | | |
| ļ | object / | | | | |



Consider the statement: "Vector v1 = new Vector(3.0, 4.0);". Here, Vector is a *class*. Vector(...) is its *constructor*. v1 is an *object* of type Vector. Also, v1 is an *instance* of the Vector class.