1.-

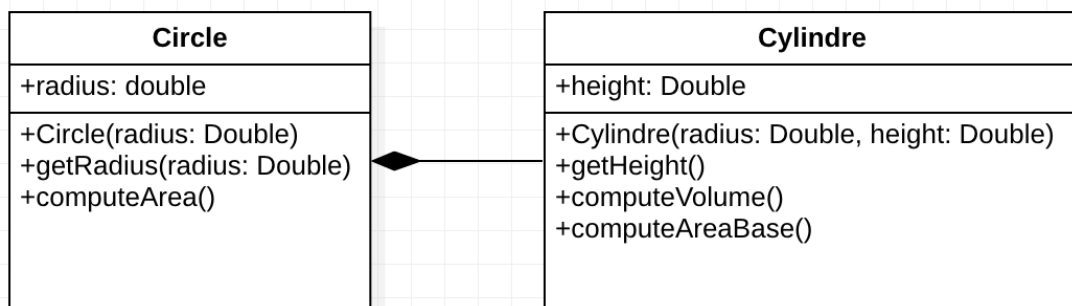The ***equals*** method calls used are different. The equals p1.equals(p2) tries to compare an instance of **PersonWithJob** to an instance of a **Person** using an equal method defined under **PersonWithJob** method. This argument fails to satisfy the condition "a **Person** is an instance of **PersonWithJob**". In the implemented code **PersonWithJob** is an instance of a **Person**, but **Person** is not an instance of of a **PersonWithJob**. The inheritance relationship is one way relations. Every **PersonWithJob** is a **Person,** but not every **Person** is a **PersonWithJob.**

3.-

   A)

   This not make sense to implements inheritance because between the classes Circle and Cylindre does not exist the '*IS-A*' criterion.

   B)

Circle	Cylindre
+radius: double	+height: Double
+Circle(radius: Double) +getRadius(radius: Double) +computeArea()	+Cylindre(radius: Double, height: Double) +getHeight() +computeVolume() +computeAreaBase()

4.-

```
┌─────────────────────────┐
│          House          │
├─────────────────────────┤
│ +lotSize: Integer       │
├─────────────────────────┤
│                         │
└─────────────────────────┘

┌─────────────────────────┐     ┌─────────────────────────┐
│          Admin          │     │        Property         │
├─────────────────────────┤     ├─────────────────────────┤
│ +computeTotalRent()     │     │ +rent: Double           │
├─────────────────────────┤     │ +computeRent()          │
│                         │     ├─────────────────────────┤
│                         │     │                         │
└─────────────────────────┘     └─────────────────────────┘
          1          0..*

                                 1

                                 1
                          ┌─────────────────────────┐
                          │        Address          │
                          ├─────────────────────────┤
                          │                         │
                          ├─────────────────────────┤
                          │                         │
                          └─────────────────────────┘
```

House

+lotSize: Integer

Admin

+computeTotalRent()

Property

+rent: Double

+computeRent()

1   0..*

1

1

Address

Condo

+numberFloors: Integer

Trailer