

## Solutions

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Each answer shows the steps, then the **result**.

### 2.1

```
public class Phone
{
    private String model;
    private int storage;
    private boolean on;
```

- public class Phone
- three private variables
- types String, int, boolean

### 2.2

- other classes cannot change the data directly, so it stays valid
- the class can change how it stores data without breaking client code

### 2.3

- **75** and **85**: each object has its own **score**

### 3.1 B

- the constructor runs with **new** and initialises the fields

### 3.2 C

- **score** is **private**, so a client cannot use it directly

### 3.3 B

- the class controls the values its data can take

### 3.4

(a)

```
public class Member
{
    private String name;
    private int visits;
    private String level;
```

- class header
- **private** on all three
- suitable types

(b)

```
public void addVisit()
{
    visits++;
}
```

- public void header with no parameters
- visits++

(c)

```
public String getLevel()
{
    return level;
}
```

- return type **String**
- returns **level**