

Solutions

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

2.1

```
public Lamp(int w)
{
    colour = "white";
    watts = w;
    on = true;
}
```

- header `public Lamp(int w)`, no return type
- `watts = w`
- the other two set

2.2

- `false`
- the default for a `boolean` instance variable never set

2.3

- any two: same name as the class; no return type; runs only with `new`

3.1 B

- the arguments must match the only parameter list; D is missing `new`

3.2 C

- class name, no return type

3.3 C

- an object instance variable that is not set is `null`

3.4

(a)

```
private String title;
private int seat;
private double price;

public Ticket(String t, int s, double p)
{
    title = t;
    seat = s;
    price = p;
}
```

- three `private` variables with suitable types

- header `public Ticket(...)` with three parameters
- each variable set from its parameter

(b)

```
public Ticket(String t, int s)
{
    title = t;
    seat = s;
    price = 9.5;
}
```

- header with two parameters
- all three variables set, price 9.5

(c)

- `Ticket t = new Ticket("Echo", 14);`