

Question 1. [14 MARKS]

1. `(double) yesterday * today`
2. `here == there`
3. `return !(a && !b);` or `return !a || b;`
4.

```
public double calculateCost(double price, double tax) {
    return (price + tax);
}
```
5.

```
public class CompactDisc {
    private boolean originalCopy;
    private static int numDiscs;
}
```
6.

```
public class Novel {
    private Author myAuthor;

    public Novel(Author a) {
        myAuthor = a;
    }
}
```
7.

```
public String getCorner(JFrame j) {
    return "(" + j.getX() + "," + j.getY() + ")";
}
```

Question 2. [14 MARKS]

```
import javax.swing.JFrame;

public class MovingFrame extends JFrame {

    private static int numShifts;

    public void shift() {
        int newX = getX() - getWidth / 4;
        int newY = getY();

        if(newX < 0) {
            newY = 0;
            newX = 0;
        }

        setLocation(newX , newY);

        numShifts++;
    }

    public static int numShifts() {
        return numShifts;
    }
}
```

Question 3. [10 MARKS]**Solution:**

```
testConstructor
  P
```

```
testConstructorGetName
  P
```

```
testMarry1
  F  'Smurf'
```

```
testMarry2
  F  null (must be lowercase)
```

```
testMarryUnmarry
  P
```

```
testSetNames
  P
```

```
testSetNamesAndMarry
  F  null (must be lowercase)
```

```
testSetNamesAndRevert
  F  'Smurf'
```

Total Marks = 38

Student #: _____

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END OF SOLUTIONS