

# Java Memory Quiz

## ANSWER KEY

Draw pictures of memory for the following Java code when the setupZoo method is called. For every line with a *this line* comment, draw the current known memory configuration after that line is executed. (2 points per line, maximum 10 points)

```
public class Zoo{
    int numAnimals;
    Koala[] koalas;
    EucalyptusTree tree;
    // Fact: Koalas eat leaves from Eucalyptus trees

    public void setupZoo() {                // this line (0)
        numAnimals = 8;                    // this line (1)
        koalas = new Koala[numAnimals];    // this line (2)
        koalas[5] = new Koala();          // this line (3)
        tree = new EucalyptusTree();      // this line (4)
    }
}
```

Hint: Remember what happens to instance variables during construction?

