

CSC 108 — Fall, 2001
Solutions to Tutorial for Week 6
All Profs Are Not Equal

1.

```
public Prof (String n, int o, boolean sab, String d){
    name = n;
    officeNumber = o;
    onSabbatical = sab;
    dept = d;
}

2. public String toString (){
    String sabMessage;
    if (onSabbatical){
        subMessage = " (on sabbatical)";
    }else{
        subMessage = "";
    }
    return "Name: " + name
        + " Office: " + office
        + " Department: " + dept
        + subMessage;
}

3. public boolean equals (Prof other){
    boolean result;
    if (other != null && officeNumber == other.officeNumber){
        result = true;{
    }else{
        result = false;
    }
    return result;
}

4. Same as previous answer but replace boolean expression in if with:

(other != null && officeNumber == other.officeNumber
    && onSabbatical == other.onSabbatical)

5. Same as previous answer but replace boolean expression in if with:

(other != null && officeNumber == other.officeNumber
    && onSabbatical == other.onSabbatical
    && name.equals(other.name))

6. Same as previous answer but replace boolean expression in if with:

(other != null && officeNumber == other.officeNumber
    && onSabbatical == other.onSabbatical
    && name.equals(other.name)
    && dept.equals(other.dept))
```

7. In the constructors, we assume that neither professor is on sabbatical and that they share Office 1234.

```
public static void createGrahams (){
    Prof coscGraham = new Prof("Graham",1234,false,"CS");
    Prof mathGraham = new Prof("Graham",1234,false,"Math");
    System.out.println("1st Prof: " + coscGraham);
    System.out.println("2nd Prof: " + mathGraham);
    if (coscGraham.equals(mathGraham)){
        System.out.println("Seems to be the same person");
    }else{
        System.out.println("different people");
    }
}
```