

This work complies with the JMU Honor Code.

Name: _____ Signature: _____ Section: _____

Instructions. This is a "closed book" examination and you must work entirely on your own. However, you may use the reference card(s) provided to you.

The source code you submit must be entirely your work and must be written entirely during the lab period. The use of any pre-existing code (other than that provided as part of the exam) is prohibited.

You may only use a terminal/shell window, the course IDE and a WWW browser; the only page you may load in the WWW browser is the course Web-CAT site.

If the code you submit for a particular question does not compile **against the official tests** you will receive a grade of 0 on that question. Hence, you should stub-out your classes before you do anything else (i.e., make sure that your classes have all of the required methods, and that each method has the correct signature and returns an appropriately-typed value if necessary). No limit will be placed on the number of submissions but, obviously, you must complete the exam during the lab period and submissions waste time. Web-CAT will not provide hints. **Your last submission is the one that will be graded.**

1. Complete the following AddHours class which should contain two methods named incrementHourNormal() and incrementHour24().

```
/**
```

```
* A utility class for Hour Additions.
```

```
* @author YOUR NAME
```

```
* @version DATE
```

```
* Acknowledgements:
```

```
*/
```

```
public class AddHours {
```

```
/**
```

```
* Use to add a given hours to a given time and determine the future clock time.
```

```
* for example given the following parameters (11, "am", 3) your return would be
```

```
* 2pm
```

```
* @param currentHour The value of current hour([1-12], 11)
```

```
* @param ampm The value of the current hour am pm ([am or pm],am)
* @param addHours The number of hours to add to the current time(3)
* @return String the value of the new future time in hours and am pm.(1pm)
*/
```

```
public static String incrementHourNormal(int currentHour,
    String ampm, int addHours)
```

```
/**
```

```
* Use to add a given hours to a given time and determine the future clock time.
```

```
* for example given the following parameters (22, 3) your return would be
```

```
* 1
```

```
* @param currentHour The value of current hour([1-24], 22)
```

```
* @param addHours The number of hours to add to the current time(3)
```

```
* @return int the value of the new future time as an int(1-24).
```

```
*/
```

```
public static int incrementHour24(int currentHour, int addHours)
```