

Practice set for chapter three

- 1) What does the following code fragment set the variable x to?

```
int y=12;
y++;
int x = y%2 == 0 ? 5 : 6 ;
```

- 2) Which of the following is the same as the Boolean statement: `!(c && d) || e`

- a. `!d && !c || e`
- b. `!c || !d || e`
- c. `e || c || d`
- d. `!c && d || e`
- e. `e && c || d`

- 3) What is wrong with this segment of code? Assume that the Boolean variable `extraCredit` and the integer variables `overallScore` and `examScore` are known by the computer.

```
boolean passedClass = false
if ( overallScore > 60 )
{
    passedClass = true;
}
else if ( examScore > 60 & extraCredit )
{
    passedClass = true;
}
else
{
    System.out.println("You must take this class over.");
}
```

- 4) Suppose you are implementing a program to apply a very simple grading rubric to student's scores from the semester. Specifically, you are provided with 3 boolean variables, `pass1`, `pass2`, and `pass3` which say whether the student passed each of the 3 exams. Students who passed all three exams receive an A in the course. Students who passed only two exams earn a B. Students who passed just one exam get a C. Any students who did not pass any of the exams earn an F. Write code that, given the variables `pass1`, `pass2`, and `pass3` determines what grade a student should receive.
- 5) No fifth problem this time. Just remember to keep working on your programming assignment.