APCS Problem Set 6: Flow Control via Conditionals

2.3 Book Problems — Ch. 6, #5

To aid your understanding of the problem, complete the table below **before** attempting to implement `totalWages()`. (5pts)

total hours	hourly rate	standard hours	standard wages	overtime hours	overtime rate	overtime wages	TOTAL WAGES
20	$10			0	$15		
40	$10						
50	$10	40		10		$150	
80	$20						$2000

4.1 Odd or Even?

Autotester results: _____ (10pts)

4.2 Positive, Negative, or Zero?

Autotester results: _____ (10pts)

5.1 Know the Rules of the Game

2. Now, take the rules and arrange them into a flow chart. You enter the flowchart by making your first roll, and there are two ultimate exits: Winning or losing. (8pts)

5.4 Implementing Your Part

2. Work on Litvin §6.9, #1 (see p157). You are going to implement the basic rules of the game using `if()/else` statements. If your flowchart from earlier is correct, it may prove useful here. Once finished, demonstrate the execution of `CrapsTest1` to at least one other classmate and then demonstrate for your teacher.

   Classmate's Name: _____

   Classmate's Signature: _____

   Teacher's Initials: _____ (20pts)

3. Per Litvin §6.9, #2, write the `Die` class, providing the methods that Litvin tells you about earlier in the section.
   . . .
   Once finished, demonstrate your tester class for your teacher.

   Teacher's Initials: _____ (10pts)

4. Now run `CrapsStats` against your classes, per Litvin §6.9, #3. If things are correct thus far, you should have ≈ 49 wins for every 100 plays. Demonstrate the `CrapsStats` program working for your teacher while the number of plays is 100,000 — which should yield a result of ≈49,300 wins.

   Teacher's Initials: _____ (5pts)

6.2 Programming Exercise

Once the program is working, demonstrate it for your teacher.

Teacher's Initials: _____ (10pts)

7 `Craps` Lab, Part II

4. Download the sources you don't already have — `ControlPanel.java`, `Craps.java`, `CrapsTable.java`, & `DisplayPanel.java` — and run the `Craps` class. If everything you've done is correct, your application should run like the original `Craps.jar`.

   Teacher's Initials: _____ (15pts)