Assignment #2 – Making Correct Change Program  
Due: Monday, 10/17/11, 11:00am

1. (25 pts.) Answer the following Self-Check Problems from your Building Java Programs book:
   (10 pts) Evaluate each expression below, as Java does, and give the resulting value:
   a. 14 / 7 * 2 + 30 / 5 + 1
   b. (18 – 7) * (43 % 10)
   c. 2 + 19 % 5 – (11 * (5 / 2))
   d. 12 – 2 - 3
   e. 17 % 10 / 4
   f. 4.0 / 2 * 9 / 2
   g. 4 * 3 / 8 + 2.5 * 2
   h. 10.0 / 2 / 4
   i. (2.5 + 3.5) / 2
   j. 813 % 100 / 3 + 2.4

   (5 pts) Suppose you have a real number variable, x. Write the steps needed and the Java expression that computes the following value, y, while using the * operator only 4 times.
   \[ y = 12.3x^4 - 9.1x^3 +19.3x^2 – 4.6x + 34.2 \]

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   (10 pts) Translate each of the following English statements into logical tests that could be used in an if/else statement. Write the appropriate if statement with your logical test. Assume that two int variables, y and z, have been declared.
   a. z is odd
   b. z is not greater than y squared
   c. y is positive
   d. z is not zero
   e. y is a multiple of z

2. (75 pts) Implement the algorithm you and your team developed in Quiz #1 for making correct change, given a specific amount of money:
   http://classes.engr.oregonstate.edu/eecs/fall2011/cs161-001/quiz1.pdf

   Your program will read the amount of money from the user, and you will output the most efficient correct change using $20, $10, $5, $1, $.25, $.10, $.05, and $.01 bills.

   Make sure that you include a program header in your program!
   //Author: Your Name
   //Date:
   //Description:

3. Electronically submit your written work and java program by the assignment due date, using TEACH.