CS 102: Quiz #1

Problem 0: (1 point) Write your name at the top of the page.

Problem 1: (8 points) Below each of the following descriptions of data, write the declaration for a variable to hold the data. Be sure to pick an appropriate type and a descriptive name.

(a) A student’s grade-point average.

(b) A student’s SAT or TOEFL score.

(c) The number of hydrogen atoms in the universe, to ten significant figures.

(d) Whether or not a student has turned in an assignment.

Problem 2: (6 points) Below each of the expressions below, write the resulting value according to Java’s precedence, associativity, and type rules.

\[(a) 7 - 4 - 9 / 3 \quad (b) (13.0 + 3) / 5 \quad (c) 1.5 * 3 + 1 / 2\]

Problem 3: (5 points) Given the variable declarations and initializations below, and assuming that a value has been stored in the variable `availableCash`, write the statement that would assign to the variable `numCandyBars` the number of whole candy bars that we could buy with our `availableCash`. Also, declare a new variable to hold the amount of money we would have left over and write the statement that computes its value.

```java
final double CANDY_BAR_COST = 0.55;
double availableCash;
int numCandyBars;
```