Review for Exam 1

1. Declare two variables that will store the price of an item and the quantity of the item ordered. Initialize them to 10.99 and 2. Define a constant for a sales tax rate of 5.5%. Increment the quantity by 3.
2. Write two assignment statements that will calculate the number of pounds and the number of ounces leftover from 253 ounces given: (16 ounces = 1 pound)

int totalOunces = 253;

int pounds;

int ounces;

1. Write the following formula in C++ code:
2. The user has been asked to enter a number between 1 and 10. Write an if-statement that will display “Invalid data” if the input is outside of that range.
3. Write an if-else statement that determines if a number is odd or even.
4. Write a selection structure that prints whether a number is positive, negative, or zero.
5. Write a while-loop that prints the powers of 2 from to .
6. Write the above loop as a for-loop.
7. Declare two variables that will contain a random numbers representing the two numbers on a pair of dice. Write a do while loop that continues to pick 2 random numbers until you get doubles.
8. Write a while loop that reads, counts, and sums the test scores entered from the keyboard until a sentinel value of -1 is entered. After you have finished the loop, display the average score.

Continue to next page for another problem.

1. Clearly mark and describe any and all actual **syntax** errors (NOT style criticisms or implicit type conversions) within this C++ program.

// This program converts the speeds 60 kph through

// 130 kph (in 10 kph increments) to mph.

#include (iostream);

#include <iomanip>

using namespace std;

int start()

{

// Constants for the speeds

const int START\_KPH = 60, // Starting speed

END\_KPH = 130, // Ending speed

INCREMENT = 10; // Speed increment

// Constant for the conversion factor

final double CONVERSION\_FACTOR = 0.6214;

// Variables

integer kph; / To hold speeds in kph

double mph // To hold speeds in mph

// Set the numeric output formatting.

cout << fixed << showpoint << setprecision(1);

// Display the table headings.

cout >> "KPH\tMPH\n";

cout << "---------------\n;

// Display the speeds.

for (kph = START\_KPH; kph <= END\_KPH; kph += INCREMENT);

// Calculate mph

mph == kph \* CONVERSION\_FACTOR;

// Display the speeds in kph and mph.

cout << kph << "\t" mph << endl;

}

}