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C++ Programming I

Fall 2015

**Week 4 Worksheet Misc**

**1. What would be the output of the following program segment?**

float fValue = 2.876;

cout.setf(ios::fixed);

cout << setprecision(1);

cout << fValue;

The output: 2.9



**2. What would you need to have in a program to be able to use one of the library functions to compute the value of iVal3? (NOTE: 2 lines of code are required.)**

#include <iostream>

#include <cmath>

using namespace std;

int main()

{

int iVal;

int cubeRoot;

cout << "Enter an integer to compute for cube root: ";

cin >> iVal;

cubeRoot=pow(iVal,3);

cout << "The cube root of the integer is: " << cubeRoot;

return 0;

}

**3. Write the declaration and initialization of a constant to set the tax rate at .075. Use an appropriate identifier for the name of the constant and format the constant name in accordance with the C++ Style Guide used in the class.**

const TAX\_RATE = 0.075 // appropriate identifier, declaration of 'const',

//& initialization of 0.075.

**4. What would be the output of the following program segment?**

int xVal, yVal, total;

xVal = 7;

yVal = 0;

if (xVal >= yVal)

{

yVal = xVal + 4;

if (xVal / 2 > 5)

xVal = xVal / 2;

else

xVal = xVal + yVal;

}

else

yVal = 100;

total = xVal + yVal;

cout << total;

The output: 29



**5. Write the following mathematical expression as a C++ expression. Be sure to use <cmath> functions, where appropriate.**

\*There is no expression listed to covert to mathematical C++ code(?)

**6. Write the code to convert an integer, iVal, to a float in the following expression. Also, show what the final value of answer would be from the code below *and* from your code that includes the conversion.**

int iVal = 27;

float answer;

answer = iVal / 5;

#include <iostream>

using namespace std;

int main()

{

int iVal = 27; // integer value

float answer; //conversion to float output

answer=static\_cast<float>(iVal)/5; // typecasting integer to float

cout << answer << endl; //output 5.4

return 0;

}

The output: 5.4

