In your answers try to be precise, don’t write poems, just give a clear answer.

1) Write an if-statement that will print a maximum of two variables n and m, you can assume these variables were already declared. (2pt.)

Answer:
if (n > m) cout << n;
else cout << m;
OR:
int max = n;
if (m > max) max = m;
cout << max;
Explanation: maximum of two numbers is a number that is smaller than the other!

2) Evaluate the following code, what will be printed? (2pt.)

```cpp
for (int i = 5; i >= 1; i = i - 2) {
    cout << "hi";
}
```

Answer: hihihi
Explanation: note that there are no spaces or commas, preserve the word also (no capital letters)
i = 5 print “hi”
i = 3 print “hi”
i = 1 print “hi”

3) Evaluate the following code, what will be printed? (2pt.)

```cpp
int n = 0;
while (n < 2) {
    cout << "hello";
    n++;
}
```

Answer: hellohello
Explanation: note that there are no spaces or commas, preserve the word also (no capital letters)
n = 0 print “hello”
n = 1 print “hello”

4) Write a block of code that prints a value of a randomly selected integer in a range from -1 to 70, use rand() function! (2pt.)

Answer: cout << rand() % 72 - 1;
* refer to the slide about rand() function for explanations

5) Write an appropriate condition for the ‘if statement’ (use ‘and’/’or’ operators where it is applicable) (1pt. each)

a) m is negative and is divisible by 5
   \[m < 0 \land m \% 5 == 0\] note that 0 in not positive nor negative
b) last digit of m is 7
   \[m \% 10 == 7\]
c) m is greater than 10 but is not odd
   \[m > 10 \land m \% 2 == 0\] not odd means even
d) m is a positive 2digit number
   \[m > 9 \land m < 100\] OR \[m >= 10 \land m <= 99\]
6) Calculate $x$ as the decimal that represents the fraction $1/7$ (1pt.)

**Answer:**

```cpp
cout << (double) 1/7;
OR
cout << 1.0 / 7;
OR
cout << 1 / 7.0;
```

**Explanation:** you can either cast the calculation (put (double) in front of it) or present one of both of the numbers as floating point number.

7) Print the sum of the square roots of 11 and 12. (use appropriate function) (1pt.)

**Answer:** `cout << sqrt(11) + sqrt(12);`