

# Fall Semester Pre-Assessment

Answer any of the following questions that you know the answer to. Don't feel pressure to answer a certain number of the questions. You are not expected to know how to answer any of the questions! We want to know how much knowledge you are coming into the program with.

## General Programming Concepts

1. What is programming syntax?

A. rules on how to make grammatically correct sentences in English	B. rules on the correct way to put commands together, including spacing and punctuation
C. the program that runs your code on the computer	D. the study of how programming has changed over time

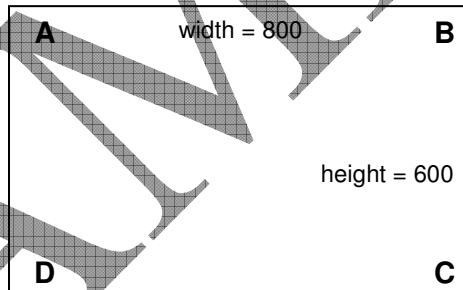
2. In programming, the term "variable" refers to:

A. a quantity that may change	B. a place where values and data can be stored
C. a list of quantities	D. a letter in a mathematical expression

3. Which choice is a programming structure that allows code to be executed repeatedly based on a given boolean condition?

A. Repeater	B. If Else Statement
C. Event	D. While Loop

4. Which corner of the rectangle is at (800,600) using a computer's coordinate system?



A. corner A	B. corner B
C. corner C	D. corner D

5. What is a function in programming?

A. the goal or use of the program	B. a document describing how the program should be used
C. a mathematical expression	D. a portion of a program that can be called and run repeatedly to perform a task

6. What does the expression != mean?

A. Equals	B. Or
C. Does not equal	D. In addition to

7. In computer programming, what is a class used for?

A. to represent something's characteristics and behaviors in one container	B. to group objects into a list
C. to teach about programming	D. to assign a type or genre to a program

8. What is an object?

A. the purpose or task of a program	B. the argument of a function
C. a particular instance of a class	D. a representation of something's characteristics and behaviors in one container

9. What is an event?

A. the output of a program	B. running or stopping a program
C. what is generated from user input like a mouse click	D. displaying graphics on the screen and moving them around

10. What is a library?

A. a collection of text	B. a collection of functions and data for use in other programs
C. the object created when opening a file	D. a reference document on how to use a program

11. Which is a valid Boolean operator?

A. And	B. Or
C. Not	D. All of the above

12. Circle ALL the valid Boolean values.

A. True	B. False
C. Sometimes	D. Maybe

13. What does RGB stand for?

A. Ritual Group Bystander	B. Red, Green, Blue
C. Repeat Graphics Boolean	D. Rest Good Beauty

14. What color is (0,255,0) in RGB?

A. red	B. orange
C. yellow	D. green

## Python Programming

1. How do you load a library called `math` for use in a Python program?

A. <code>import math</code>	B. <code>include math</code>
C. <code>math.init()</code>	D. <code>load math</code>

2. How do you create an object `puppy` that is an instance of a `Dog` class?

A. <code>Dog.create(puppy)</code>	B. <code>puppy.init()</code>
C. <code>puppy = Dog()</code>	D. <code>Dog = puppy()</code>

3. What is Pygame?

A. a game programming language built on top of Python	B. a set of libraries to make displaying graphics and writing games in Python easier
C. a Python game outline to build on	D. a special compiler for Python games

4. In the statement below, what does the 100 represent?

```
font = pygame.font.Font("arial.tty", 100)
```

A. character space allotment for this font	B. The length of the font
C. the code for Arial font	D. the size of the font

5. In the statement below, what do the three numbers 255, 255, 255 represent?

```
text = font.render("Welcome!", 1, (255,255,255))
```

A. the color of the font	B. The size of the font
C. the length of the text	D. Where to draw the text on the screen

6. Which one of these functions draws an image to the screen using Pygame?

A. sketch	B. draw
C. print	D. blit

7. What is the output of the following code?

```
for letter in "Girlstart":
    print letter
```

A. Girlstart	B. letters in "Girlstart" backwards (tratslrIG)
C. G i r l s t a r t	D. letters in "Girlstart" in a random order

8. What does the `str()` function do?

A. turn the argument into a string	B. put a list in a random order
C. sort a list in ascending order	D. draw an image to the screen

9. Which of the following is NOT an example of defining a variable in Python?

A. <code>1 + 1 = two</code>	B. <code>a = b + c</code>
C. <code>hair = 2</code>	D. <code>bark = True</code>

10. What is a Pygame sprite?

A. a game character, like a fairy or troll	B. the movement of an object
C. an object that is drawable to the screen	D. the size of a program

11. Which choice would be a good use of a Pygame sprite group?

A. To create a game character's movements and behaviors	B. To update or draw similar objects at the same time
C. To define rules of a game	D. To draw the screen

12. What is the output of the following code?

```
money = 6
bored = True
if money <= 5 or not bored:
    print "Do your homework"
elif money > 5:
    print "Go to the movies"
print "Take a nap"
```

A. Do your homework	B. Go to the movies
C. Do your homework Take a nap	D. Go to the movies Take a nap

SAMPLE