NAME : _____

CLASS : _____

DATE : _____

Intro to Python Turtle Graphics 2.1-2.4 [50 points]
22 Questions

1. How does Tracy start when you first open up Python?

A Pen up and facing up

B Pen down and facing down

C Pen down and facing right

D Pen up and facing right

2. Which of the following would move Tracy 50 pixels backwards? (Select two)

A backward(50)

B forward(50)

C forward(-50)

D backward(-50)

3. Which of the following is **not** an accurate description of the location of each point in Tracy's grid world?

A The point (-200,0) is on the bottom of the screen

B The point (0,0) is in the center of the screen.

C The point (200,-200) is at the bottom right corner of the screen

D The point (-200,-200) is at the bottom left corner of the screen

4. The command circle(30) will tell Tracy to draw a circle of diameter 30 units.

A True

B False

5. Which command would make Tracy execute an action the quickest?

A speed(1)

B speed(0)

C speed(5)

D speed(10)

6.
```
for i in range(3):
    circle(25)
    forward(50)
```
The code shown draws 3 circles on the screen. If I wanted to alter this loop to draw 15 circles, how many lines would my code be?

A 1

B 3

C 10

D 30

7.
```
for i in range(4):
    forward(60)
    left(90)
```
The following program will have Tracy draw a square with each side length measuring 60 pixels.

A False

B True

8.
```
right(90)
left(90)
right(180)
```
If Tracy was facing up, what direction would she be facing if the following code was run?

A down

B up

C right

D left

9.
```
penup()
for i in range(3):
    pendown()
    circle(30)
    forward(60)
backward(100)
```
Using the given code, which lines of code will be repeated three times?

A 3 and 4

B 3, 4, 5, and 6

C 3, 4, and 5

D 2, 3, 4, and 5

10.
```
penup()
setposition(-200,0)
pendown()
for i in range(20):
    forward(10)
```
I want Tracy to cross from one side of the screen to another. The code shown won't do that. Write a correct line of code, including which step number you're changing, to make Tracy go all the way across the screen. [Note there is more than one correct answer.]

11. What would be the result of this program?

```
penup()
backward(150)
pendown()
for i in range(2):
    for i in range(2):
        circle(50)
        penup()
        forward(100)
        pendown()
```

A. 4 circles of radius 100 extending all the way across the screen.

B. 2 circles of radius 50 extending halfway across the screen.

C. 4 circles of radius 50 extending all the way across the screen.

D. 2 circles of radius 100 extending halfway across the screen.

12. All of the following are valid Python codes except:

A. up(40)

B. circle(40)

C. for i in range(40):

D. forward(40)

13. Which of the following is NOT a reason for loops are useful when writing code?

A. Loops make our code more efficient.

B. Loops make our code easier to read

C. Loops make it easier to alter code once it's written

D. Loops let us make shapes of multiple sizes

14. What are the scale dimensions of Tracy's coordinate world?

A. 1 box = 10 pixels

B. 1 box = 100 pixels

C. 1 box = 20 pixels

D. 1 box = 40 pixels

15. Which of the following is **not** true?

A. The command forward(25) and backward(-25) result in the same spot for Tracy.

B. Tracy always starts drawing a circle from the top of the circle when facing right.

C. The penup command tells Tracy to stop drawing.

D. The setposition command allows Tracy to start anywhere on the grid.

16. What's the name of the turtle we are using to learn Python Turtle Graphics? (Please don't get this wrong)

A. Tricia

B. Tracy

C. Tyrone

D. Travis

17. What is the name of the section in CodeHS you can use to start your own code from scratch?

A Sandbox
B Playground
C Playroom
D Compiler

18. Which is *not* true regarding the Python programming language?

A It is widely used in YouTube videos.
B It can create games, analyze literature, and provide a gateway to learning other programming languages.
C It is widely used in Google algorithms.
D It's designed only for advanced coders.

19. You get badges after completing certain required programs in CodeHS.

A True
B False

20. 1. Which of the following pieces of code will make Tracy do the following actions three times: go forward, change colors, and then turn around.

A forward(30)color("blue")left(180)forward(30)color("green")left(180)
B for i in range(4):
forward(30)color("blue")left(180)forward(30)color("green")left(180)
C for i in range(3):
forward(30)color("blue")left(180)color("red")
D for i in range(3):
backward(30)color("blue")left(180)

21. Which of the following statements are true about for loops?
A. By default, the range function starts at 0
B. Using for i in range(4) will result in i taking the values 0, 1, 2, 3, 4
C. For loops let you repeat something any number of times
D. Statements in a for loop do not need to be indented
E. It is not possible to have the range value count 6, 12, 18, 24
F. It is not possible to have the range values count 1, 2, 4, 8, 16

A A B C E F
B A C F
C A and C
D A B C F

22. What is the difference between defining and calling a function?

A. Defining a function means you are teaching the computer a new word. Calling a function means you are commanding the computer to complete defined actions.

B. Defining a function must be done each time you want to use the function. Calling a function can only happen once in your code.

C. There is no difference.

D. Calling a function means you are teaching the computer a new word. Defining a function means you are commanding the computer to complete defined actions.