1. Once you have learned the basics of a programming language, how does this affect your ability to learn and use a second programming language?" **1 point**

- ○ The syntax and semantics will be the same.
- ○ It's difficult to learn and use a second language.
- ○ You should only code in one language.
- ◉ It's easier to learn and use a second language.

2. What is a function? **1 point**

- ○ The task a program is written to accomplish
- ◉ A reusable block of code that performs a specific task
- ○ The beginning of a program defining who wrote it and why
- ○ A document describing a software project

3. What are some of the benefits of automation? Select all that apply. **1 point**

- ☑ Doesn't get tired
- ☐ Can accomplish creative tasks
- ☐ More cost-effective for complex, seldom-done tasks
- ☑ Consistency

4. What is the term for the set of rules for how statements are constructed in a programming language? **1 point**

- ◉ Syntax
- ○ Semantics
- ○ Format
- ○ Grammar

5. What is the program that reads and executes Python code by translating it to computer instructions called? **1 point**

- ◉ Compiler
- ○ Translator
- ○ Linker
- ○ Interpreter

6. Complete the code so that the string "I am writing Python code!" will print to the screen. Remember that syntax precision is important in programming languages. A missing capital letter, spelling error, or punctuation mark can produce errors. **1 point**

```
1  # Replace the blanks with the correct code and syntax:
2  print("I am writing Python code!")
3
4
5  # Should print: I am writing Python code!
6
```

Run
Reset

```
I am writing Python code!
```

7. What should be the output of the expression below? **1 point**

```
1  print(6*2-5/(1+4)+3**2)
```

- ○ 0.28
- ◉ 20.0
- ○ 49.0
- ○ 19.36

8. Assuming there are 60 minutes in an hour, write a program that calculates the number of minutes in a 24 hour day. Print the result on the screen. Note: Your result should be in the format of just a number, not a sentence. **1 point**

```
# Constants
minutes_in_an_hour = 60
hours_in_a_day = 24

# Calculation
minutes_in_a_day = minutes_in_an_hour * hours_in_a_day

# Print the result
print(minutes_in_a_day)
```

Run Reset

```
1440
```

9. Use Python to calculate how many number-based passcodes can be formed with 10 numerals (0 through 9). For a 1 numeral passcode, there would be 10 possibilities. For a 2 numeral passcode, each numeral is independent of the other, so there would be 10 times 10 possibilities. Using this information, print the amount of possible passwords that can be formed with 8 numerals. Note: Your result should be in the format of just a number, not a sentence. **1 point**

```
# Enter code here:
possibilities = 10 ** 8
print(possibilities)
# Should print 100000000
```

Run Reset

```
100000000
```

10. Fill in the blank to calculate how many sectors a given 16 GB (gigabyte) hard disk drive has. The given hard drive is divided into sectors of 512 bytes each. How many sectors should this drive have? Your result should be in the format of just a number, not a sentence. Note: To calculate the disk size, multiply by multiples of 1024. In the code below, the "disk_size" of 16 GB is expressed as multiplying 16 by 1024 three times to get from bytes, to kilobytes, to megabytes, and finally to gigabytes. **1 point**

```
disk_size = 16*1024*1024*1024
sector_size = 512
sector_amount = disk_size / sector_size

print(sector_amount) # Should print 33554432.0
```

Run Reset

```
33554432.0
```

Upgrade to submit