Name:_____

Note:

A // B is the integer that results from dividing B into A and rounding down (dropping the "remainder").

A % B is the integer that is the remainder ("left over") from A // B.

1. [**With your instructor**] What is:

   a. `17 // 3`

   b. `17 % 3`

   c. `25 // 6`

   d. `25 % 6`

2. [**With your instructor**] Consider the contrived code below.
   What will the code output ("print") when executed?

Code	**Output**

`def square(x):`
`  print("x is:", x)`
`  return x ** 2`
 	
`def main():`
`  x = square(2)`
`  y = square(x)`
`  print(square(y))`
`  print("x is:", x)`
 	
`main()`	

3. **[With your instructor]** Suppose that you are ***given*** (and should ***call*** in this exercise) a function ***largest_digit*** that takes an integer ***M*** and returns the largest digit in ***M***. In the box below, write a function called ***largest_in_cube*** that has a single parameter ***n*** and returns the largest digit in the *cube* of ***n***.

4. Consider the contrived code below. What will the code output ("print") when executed?

Code	**Output**

`def main():`
`  print("hi")`
`  foo()`
`  x = bar()`
`  print(x // 3)`
`  print("bye")`
 	
`def foo():`
`  print("ok:", bar())`
`  print("foo")`
 	
`def bar():`
`  print ("bar")`
`  return 16`
 	
`main()`	

5. In the box below, write a function called ***back_and_forth*** that has two parameters – ***t*** that is a SimpleTurtle, and ***m*** that is an integer – and makes its SimpleTurtle go ***m*** pixels forward, then 3 * ***m*** pixels backward.

6. Consider the contrived code below. What will the code output ("print") when executed?

Code	**Output**

`def main():`
`  print(foo(13, 2))`
`  print(foo(2, 13))`
 	
`def foo(a, b):`
`  return (a % 4) + b`
 	
`main()`	