Your name:_____ **SOLUTION** _____

If you don't know the answer to a question, *ask your instructor for help*.

1. At each session, you find what to do BEFORE the session at (circle your choice):

   Moodle www.rose-hulman.edu/class/csse/csse120/202320
   (in the Preparation for the session)

2. You use Moodle primarily for which of the following? (Check all that apply)

   ___ Taking quizzes associated with the Preparation Videos/Reading.

   ___ Turning in work.

   ___ Seeing your grades.

3. At each session, you normally do which of the following ***BEFORE*** the in-class session? (Check all that apply)

   ___ Watch videos (and/or do reading) and do their associated quizzes on Moodle.

   ___ Do a *Preparation-Summary Quiz*, turn it in to Moodle, and check your own answers.

   ___ Get Starting Code for the coding exercises.

   ___ Watch and do Follow-Me videos, using the Starting Code for coding exercises.

   ___ Take notes as desired, especially questions to ask in class based on the Preparation materials.

4. At each session, you normally do which of the following ***DURING*** the in-class session? (Check all that apply)

   ___ Ask questions (and listen to classmates' questions) about the Preparation material.

   ___ Do a short *Before-the-Coding Quiz.*

   ___ Do active learning by doing coding exercises, sometimes via Pair Programming,
   and getting IMMEDIATE one-on-one help whenever you are stuck or unsure of your answer.

5. At each session, you normally do which of the following ***AFTER*** the in-class session? (Check all that apply)

   ___ Complete any part of the coding that you did not finish in class, getting help from student assistants during evening office hours, as well as from your instructor. Turn it in by doing TWO things: commit-and-push (see details in class) and do the relevant quiz in Moodle.

   ___ Reach out for help with any concepts from the session that are not clear to you.

   ___ Do the Preparation for the *next* session.

6. **True** or ***False*** (circle one): In a ***flipped*** classroom, the instructor typically spends about half of each session lecturing.

7. ***True*** or False (circle one): You get ***full credit*** for any serious attempt at the quizzes that are part of the Preparation for most sessions, as well as for any in-class quizzes.

8. When you encounter a coding exercise in a module (file) whose name has "e" for "example", as in `m5e_loopy_turtles.py`, you should: (Check all that apply)

   ___ Read the comments and code in the module ___ Run the module.

9. When the following statement runs (executes):

   ```
   print("robot", 1 + 2)
   ```

   what appears on the Console? **robot 1 + 2** **robot 3** **"robot 3"** (circle your choice)

10. When the following statement runs (executes):

    ```
    # print("clown")
    ```

    what appears on the Console? **clown** **"clown"** ***nothing appears*** (circle your choice)

11. ***True*** or **False** (circle one): When you complete a module with **TODO**'s in it, you should ***commit-and-push*** your work by using **Git ~ Commit**. Doing so even more frequently is fine.

12. Write a statement that would make the name **answer** refer to the number **42** as its value.

    ```
    answer = 42
    ```

13. Which of the following would make the name **bob** refer to the string **"alice"** as its value?

    bob = "alice" **alice = "bob"** **bob = alice** **alice = bob** (circle your choice)

14. Write a statement that would make the name **x** refer to the number that is the sine of the number to which the name **z** refers. (Assume that the code already includes `import math`.)

    ```
    x = math.sin(z)
    ```

15. ***True*** or **False** (circle one): I understand the so-called "dot trick". [If not, ask your instructor to explain it!]

This quiz continues on the next page.

16. Write an expression that would ***construct*** a **`SimpleTurtle`**, as defined in the **`rg`** (short for *rosegraphics*) module, and give that constructed `SimpleTurtle` the name ***alpha_turtle***.

```
alpha_turtle = rg.SimpleTurtle()
```

17. To ***construct*** a Circle, as defined in the **`rg`** (short for *rosegraphics*) module, you would type:

```
rg.Circle
```

followed by what punctuation symbols? ***_____parentheses_____***

18. The videos introduced the idea of ***methods*** describing "*who - does what - with what*". In the following turtle graphics example from the video, draw arrows to indicate the "who", the "does what", and the "with what" part.

who	**does what**	**with what**
	`nadia.forward(200)`	
`nadia is the WHO`	`forward is the DOES WHAT`	`200 is the WITH WHAT`

19. To ***call*** the method ***pen_up*** on the ***SimpleTurtle*** object whose name is ***beta_turtle*** , you would type:

```
beta_turtle.pen_up
```
(fill in the blanks)

followed by what punctuation symbol? ***____parentheses____***

20. Suppose that the code has constructed a ***SimpleTurtle*** and assigned the name **`mary`** to it. Which of the following would set the ***speed*** ***instance variable*** of **`mary`** to **`8`**? Circle one:

```
mary.speed(8)        mary.speed = 8        speed = 8
```

21. Fill in the blanks below ***very briefly*** (just give the essence of the ideas -- only a few words for each):

Constructing an object causes space for the object's data to be allocated and initialized.

An object's ***methods*** are what the object can do.

An object's ***instance variables*** are what the object knows (i.e., what data it has).