## **Know Questions - VEXcode V5 Python**

Check your understanding of the concepts in the **Loop There It Is! Unit** by answering these questions:

- 1. True or False: Controllers use loops in order to check for input responses from the buttons and joysticks.
  - a. True
  - b. False
- 2. Loops are \_\_\_\_\_\_.
  - a. documents the data types available
  - b. conditionally executes a group of statements
  - c. statement(s) to handle errors that occur
  - d. programming structures that repeat behaviors
- 3. True or False: In VEXcode V5, the repeat (*for*) and forever (*while*) loop structures repeat any instruction inside of it, and for the number of times specified. Instructions inside of the repeat and forever loop structures are run in order from top to bottom.
  - a. True
  - b. False
- 4. In the following project, how many times does the robot turn right?

```
30
     # Library imports
    from vex import *
31
32
33
     # Begin project code
     drivetrain.drive_for(FORWARD, 100, MM)
35
     for repeat count in range(4):
36
         drivetrain.turn for(RIGHT, 90, DEGREES)
37
         drivetrain.drive_for(FORWARD, 50, MM)
         wait(5, MSEC)
38
39
     drivetrain.drive_for(REVERSE, 100, MM)
```

- a. The robot will turn right 9 times because it is set to turn 90 degrees.
- b. The robot will turn right 5 times because the drive for instruction moves 5mm.
- c. The robot will turn right 4 times because the repeat structure is set to repeat 4 times.
- d. The robot will turn right one time because there is only one turn for instruction in the project.
- 5. True or False: Robots are not good at repetitive tasks like humans are because any slight error in their programming increases with each repetition.
  - a. True
  - b. False