CS 146 Quiz 2 9/20/24 Section: A Name:

Closed book, closed notes, log out of computer! Cheat sheet on reverse. Please write neatly!

2.2. Write an appropriate docstring for the following function

```
import turtle as t
def mystery(a, b):
    """
    for i in range(2):
        t.forward(a)
        t.right(90)
        t.forward(b)
        t.right(90)
        return a * b
```

2.3. What value should you assign to the variable n to so that total has the specified value after this code executes. The value for n must be an integer that results in valid Python code (i.e., not cause an error).

total = 0	total = 0
for i in range(2):	for i in range(n):
<pre>for j in range(n):</pre>	for j in range(2):
for k in range(4)	total = total + 1
total = total + 1	for j in range(2):
	total = total + 1
a) total is 16	<pre>b) total is 16</pre>

2.1. Write a function named ann\_area that has two parameters inner and outer (representing the inner and outer radius of an annulus) and returns the area of annulus (shaded grey below). Recall that the area of annulus is  $\pi(outer^2 - inner^2)$ . You can assume outer > inner and there exists a constant PI set to the value of  $\pi$ . You do not need to include comments or docstrings.

