INFT1207 Lab 3 Group 3

Test Case Design Document

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| **Test Case No.** | **Sub-cases** | | **Use Mode** | **Descr.** | **Params** | **Expected Output** | **Actual Output** | **Match** |
| 1 | | a | C | radius >= 0 | 0 | 0 | 0 | Y |
|  | | b | C | radius >= 0 | 1 | Pi | Pi | Y |
|  | | c | C | radius >= 0 | 5 | 25pi | 25pi | Y |
| 2 | |  | C | radius < 0 | -1 | pi | pi | Y |
| 3 | | A | C | Circle radius is imaginary number, Boolean, or str | Sqrt(-1) | Domain error | Domain error | Y |
|  | | B | C | Circle radius is imaginary number, Boolean, or str | True | TypeError | Type error | Y |
|  | | C | C | Circle radius is imaginary number, Boolean, or str | “radius” | TypeError | Type error | Y |
| 4 | | A | E | Major and minor axes are negative | -1, -1 | Pi | Pi | Y |
|  | | B | E | Major or minor axis is negative | -1, 1 | -pi | -pi | Y |
| 5 | | C | E | Zero or greater for both | 0, 1 | 0 | 0 | Y |
|  | | D | E | Zero or greater for both | 1, 1 | Pi | Pi | Y |
|  | | E | E | Zero or greater for both | 2, 5 | 10pi | 10pi | Y |
| 6 | | A | E | One or more is imaginary, Boolean or str | Sqrt(-1), 1 | ValueError | ValueError | Y |
|  | | B | E | One or more is imaginary, Boolean or str | True, 1 | TypeError | TypeError | Y |
|  | | C | E | One or more is imaginary, Boolean or str | “major”, 1 | TypeError | TypeError | Y |
| 7 | | A | T | One or more negative nums | -1, -1, -1 | 1 | 1 | Y |
|  | | B | T | One or more negative nums | -1, -1, 1 | -1 | -1 | Y |
|  | | c | T | One or more negative nums | -1, 1, 1 | 0 | 0 | Y |
| 8 | | A | T | Zero or greater | 0, 1, 1 | 0.5 | 0.5 | Y |
|  | | B | T | Zero or greater | 1, 1, 1 | 1 | 1 | Y |
|  | | C | T | Zero or greater | 2, 3, 4 | 10 | 10 | Y |
| 9 | | A | T | One or more is imaginary, Boolean or str | Sqrt(-1), 1, 1 | ValueError | ValueError | Y |
|  | | B | T | One or more is imaginary, Boolean or str | True, 1, 1 | TypeError | TypeError | Y |
|  | | C | T | One or more is imaginary, Boolean or str | “value”, 1, 1 | TypeError | TypeError | Y |
| 10 | | A | R | Negative numbers | -1, 1 | -0.5 | -0.5 | Y |
|  | | B | R | Negative numbers | -1, -1 | 0.5 | 0.5 | Y |
| 11 | | A | R | Zero or greater | 0, 1 | 0 | 0 | Y |
|  | | B | R | Zero or greater | 1, 1 | 0.5 | 0.5 | Y |
|  | | C | R | Zero or greater | 2, 3 | 2.5 | 2.5 | Y |
| 12 | | A | R | One or more is imaginary, Boolean or str | Sqrt(-1), 1 | ValueError | ValueError | Y |
|  | | B | R | One or more is imaginary, Boolean or str | True, 1 | TypeError | TypeError | Y |
|  | | C | R | One or more is imaginary, Boolean or str | “major”, 1 | TypeError | TypeError | Y |