**Test Function Document**

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| Project Name: Geometry | |
| Automation Title: test\_polygon | Version: 1.0 |
| Testing Phase: Phase 1 | Date of Test: 16 nov 2024 |
| Module Name: Shapes | |

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| Function Title: polygon | | | | Test Designed by: Ram | | | |
| Test Priority (Low/Medium/High): Medium | | | | Test Designed Date: 14 Nov 2023 | | | |
| Description: The polygon function takes a list as input and passes it to triangle or quadrilateral function if list is size 3 or 4, else it declares it a Large Polygon (if size >4) | | | | Test Executed by: Ram | | | |
| Test Execution date: 15 nov 2023 | | | |
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| Pre-conditions: None | | | | | | | |
| Dependencies: triangle, quadrilateral | | | | | | | |
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| S. No | Equivalence Class | Test case data | Expected Results | | Actual Results | Status (Pass/Fail) | Notes |
| 1 | IEC1 | 1 | Function returns "Input is not a list" | | Function returned "Input is not a list" | Pass | Integer input.  Invalid EC label starts with IEC. Test name: test\_int\_input() |
| 2 | IEC2 | 0.5 | Function returns "Input is not a list" | | Function returned "Input is not a list" | Pass | Float input. Test name: test\_float\_input() |
| 3 | IEC3 | “notPoly” | Function returns "Input is not a list" | | Function returned "Input is not a list" | Pass | String input.  Test name: test\_string\_input() |
| 4 | VEC1 | [1] | Function returns “Not a polygon” | | Function returned “Not a polygon” | Pass | Valid input label starts with VEC. Test name: test\_EC1() |
| 5 | VEC2 | [1,2,3] | Stub triangle\_stub1 for function polygon.triang (n1,n2,n3) should be called once with (1,2,3) | | Stub triangle\_stub1 for function polygon.triang (n1,n2,n3) was called once with (1,2,3) | Pass | Test name: test\_EC2\_with  \_triangle\_stub() |
| 6 | VEC3 | [1,2,3,4] | Stub quadrilateral\_stub1 for function polygon.quadrilateral (n1,n2,n3,n4) should be called once with (1,2,3,4) | | Stub quadrilateral\_stub1 for function polygon.quadrilateral (n1,n2,n3,n4) was called once with (1,2,3,4) | Pass | Test name: test\_EC3\_with\_  quadrilateral\_stub() |
| 7 | VEC4 | [1,2,3,4,5] | Function returns “Large Polygon” | | Function returned “Large Polygon” | Pass | Test name: test\_EC4() |