## TEST PLANS:

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| --- | --- | --- | --- | --- | --- |
| ID | Description | Precondition | Expected I/P | Expected O/P | Actual O/P |
| H\_01\_L\_01 | Input 1 operand | Prime/even/angstrom/factorial/ checked | Input 1 operand only | Enter 1 operand | Enter 1 operand |
| H\_01\_L\_02 | Input 2 operand | add/subtract/multiply/divide/perimeter/area are chosen | Input 2 operand only | Enter 2 operand | Enter 2 operand |
| H\_01\_L\_03 | Input 3 operand | Triangle area/perimeter chosen | Input 3 operand only | Enter 3 operand | Enter 3 operand |
| H\_02 | Perform arithmetic operations | Add/subtract/division/multiplication/factorial chosen | Input operands | Correct result obtained | Correct result obtained |
| H\_02\_L\_01 | Perform add | Chosen add and input 2 operand | 10,20 | 30 | 30 |
| H\_02\_L\_02 | Perform add | Chosen add and input 2 operand | 750,7500 | 8250 | 1500 |
| H\_02\_L\_03 | Perform subtraction | Chosen subtract and input 2 operand | 0,3 | -3 | -3 |
| H\_02\_L\_04 | Perform subtraction | Chosen subtract and input 2 operand | 1000,900 | 100 | 1 |
| H\_02\_L\_05 | Multiply | Chosen Multiply and input 2 operand | 1,0 | 0 | 0 |
| H\_02\_L\_06 | Multiply | Chosen Multiply and 2 operand | 2,5 | 10 | 2 |
| H\_02\_L\_07 | Divide | Chosen divide and 2 operand | 1,0 | Undefined | 0 |
| H\_02\_L\_08 | Divide | Chosen divide and 2 operand | 2,2 | 1 | 3 |
| H\_02\_L\_08 | Factorial | Chosen factorial and 1 operand | 5 | 120 | 120 |
| H\_03 | Perform check operations | Prime/angstrom/even check chosen | Input operand | Correct result obtained | Correct result obtained |
| H\_03\_L\_01 | Prime check | Chosen prime and 1 operand | 7 | 0 | 0 |
| H\_03\_L\_02 | Angstrom check | Chosen Angstrom and 1 operand | 153 | 1 | 1 |
| H\_03\_L\_03 | Even/odd check | Chosen even/odd and 1 operand | 18 | 1 | 1 |
| H\_04 | Area calculation | Choose shape/area | Input side | Area obtained | Area obtained |
| H\_04\_L\_01 | Circle area | Choose circle area | 10 | 314 | 314 |
| H\_04\_L\_02 | Square area | Choose Square area | 4 | 16 | 16 |
| H\_04\_L\_03 | Rectangle area | Choose Rectangle area | 9,2 | 18 | 18 |
| H\_04\_L\_04 | Triangle area | Choose Triangle area | 8,8,8 | 24.712812 | 24.71 |
| H\_05 | Perimeter calculation | Choose shape/perimeter | Input sides | Perimeter obtained | Perimeter obtained |
| H\_05\_L\_01 | Circle Perimeter | Choose circle Perimeter | 100 | 628 | 628 |
| H\_05\_L\_02 | Square Perimeter | Choose Square Perimeter | 4,4 | 16 | 16 |
| H\_05\_L\_03 | Rectangle Perimeter | Choose Rectangle Perimeter | 9,2 | 22 | 22 |
| H\_05\_L\_04 | Triangle Perimeter | Choose Triangle Perimeter | 8,8,8 | 24 | 24 |