\*WORK IN PROGRESS. SOME OF THESE MIGHT BE REDUNDANT AND WILL NEED TO BE REMOVED (DOES PARENTHESES TESTING NEED TO BE DONE FOR *EVERY* OPERATOR? ETC.)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test Case ID | Test Case Description | Test Data | Expected Results | Actual Results | Pass/Fail |
| Add-101 | Test addition operator | 2 + 2 | 4 |  |  |
| Add-102 | Test addition operator with parentheses (split) | (2) + (2) | 4 |  |  |
| Add-103 | Test addition with parentheses | (2+2) | 4 |  |  |
| Add-104 | Test addition with multiple parentheses | (2+((2))) | 4 |  |  |
| Sub-101 | Test subtraction operator | 10 - 5 | 5 |  |  |
| Sub-102 | Test subtraction operator with parentheses (split) | (10) - (5) | 5 |  |  |
| Sub-103 | Test subtraction operator with parentheses | (10 - 5) | 5 |  |  |
| Sub-104 | Test subtraction operator with multiple parentheses | (((10)) - (5)) | 5 |  |  |
| Sub-105 | Test negation operator | -(13 + 2) | -15 |  |  |
| Sub-106 | Test negative values being added to positive values (no parentheses) | -1 + 1 | 0 |  |  |
| Sub-107 | Test negative values being added to positive values (inside parentheses) | (-1) + 1 | 0 |  |  |
| Sub-108 | Test negative values being added to positive values (outside parentheses) | -(1) + 1 | 0 |  |  |
| Sub-109 | Test negative values subtracted from negative values (with parentheses) | (-(12) - (6)) | -18 |  |  |
| Sub-110 | Test negative values subtracted from negative values (no parentheses) | -12 - 6 | -18 |  |  |
| Mult-101 | Test multiplication operator | 15 \* 2 | 30 |  |  |
| Mult-102 | Test multiplication operator (inside parentheses) | (15\*2) | 30 |  |  |
| Mult-103 | Test multiplication operator (outside parentheses) | (15) \* 2 | 30 |  |  |
| Mult-104 | Test negative value times negative value = positive value | -4 \* -4 | 16 |  |  |
| Mult-105 | Test negative value times negative value = positive value (with parentheses) | -(4) \* (-4) | 16 |  |  |
| Mult-106 | Test multiplication times 0 | 15 \* 0 | 0 |  |  |
| Div-101 | Test division operator | 100 / 25 | 4 |  |  |
| Div-102 | Test division operator (inside parentheses) | (100 / 25) | 4 |  |  |
| Div-103 | Test division operator (split parentheses) | (100) / 25 | 4 |  |  |
| Div-104 | Test divide by zero error | 1 / 0 | Error |  |  |
| Div-105 | Test divide by zero error (with parentheses) | (44) / 0 | Error |  |  |
| Div-106 | Test divide by fraction (in parentheses) | (10) / (½) | 20 |  |  |
| Div-107 | Test divide by fraction (no parentheses) | 10 / 1/2 | 20 |  |  |
| Div-108 | Test multiply by division | 30 \* (1/2) | 15 |  |  |
| Mod-101 | Test modulo operator | 10%3 | 1 |  |  |
| Mod-102 | Test modulo fraction | 100%(9/2) | 1 |  |  |
| Mod-103 | Test modulo fraction (no parentheses) | 100% 1/2 | 0 |  |  |