|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Allows input of expressions into the calculator. | | | | | | | | |  | |
|  | Presents expressions cleanly and mathematically. | | | | | | | |  | |
|  | | | Presents indices in superscript. | | | | | | 24.3 | |
|  |  | | Eliminates multiplication symbols in algebraic expressions (eg: ‘2b’, ‘ax’), but not in arithmetic expressions (eg: ‘2 x 5’). | | | | | | 4a 4x5 | |
| Replaces division symbols with a fractional line, placing the divisor underneath the dividend. | | | | | | 1÷9 | |
| Allows input of BIDMAS operators and other terms. | | | | | | | |  | |
|  | | | Allows input of variables. | | | | | | π | |
|  | Allows variables to be user-defined. | | | | |  | |
|  | | | Allows input of functions. | | | | | | cos(x) | |
|  | | | | Allows functions to be user-defined. | | | | |  | |
| Provides an accurate output to the expressions inputted. | | | | | | | | |  | |
|  | Correctly computes BIDMAS operations. | | | | | | | |  | |
|  | Correctly deals with brackets in layers. | | | | | | (5(5x5))  (5(5x3))  (2x5)(3x5) | |
|  | | Regular | Negative | Fractional | Break |  | |
| Indices | | 24 | 9-1 | 21/9 | -21/2 |
| Division | | 39÷7 | -4÷2  -4÷-2 | 2÷(1/2) | 2/0 |
| Multiplication | | 39x7 | 2x-2  -2x-2 | 2x(1/2) | N/A |
| Addition | | 2+2 | 2+-2 | 2+(1/2) | N/A |
| Subtraction | | 2-2 | 2--2 | 2-(1/2) | N/A |
| Correctly graphs a variety of curves according to the calculator input. | | | | | | |  | |
|  | y = a | | | | | | 5 | |
| y = mx + c | | | | | | 2x+5 | |
| y = ax2 + bx + c | | | | | | 3x2+6x+5 | |
| y = ax3 + bx2 + cx + d | | | | | | 5x3-2x2+6x-2 | |
| y = 1/ax | | | | | | 1/x  1/2x  1/(x-1) | |
| y = abx | | | | | | e2x  2x | |
| y = log10x | | | | | | log10x  2log102x | |
|  |

**Success Criteria**