

$$\text{exprf} := \text{abs}(A \cdot B \cdot C + 1 + x^{(C+1)}) - x^{(B+1)} + A;$$

$$|A B C + 1 + x^{C+1}| - x^{B+1} + A \quad (1)$$

$$\text{exprg} := \text{piecewise}(x < B - 1, \text{limit}(\text{exprf}, x = B - 1), B - 1 \leq x \text{ and } x < C + 5, \text{exprf}, C + 5 \leq x, \text{limit}(\text{exprf}, x = C + 5));$$

$$\left\{ \begin{array}{ll} \lim_{x \rightarrow B-1} (|A B C + 1 + x^{C+1}| - x^{B+1} + A) & x < B - 1 \\ |A B C + 1 + x^{C+1}| - x^{B+1} + A & B - 1 \leq x \text{ and } x < C + 5 \\ \lim_{x \rightarrow C+5} (|A B C + 1 + x^{C+1}| - x^{B+1} + A) & C + 5 \leq x \end{array} \right. \quad (2)$$

$$\text{expr} := (A + B + 1) \cdot \text{exprf}^{(A+B+C)} + (C + 2) \cdot \text{subs}(x = y, \text{exprg}) \left(\frac{1}{(A+B+C+1)} \right) - \cos(\text{subs}(x = \text{exprg} + y, \text{exprf})) :$$

$$\text{exprs} := \text{subs}(\{A=0, B=0, C=0\}, \text{expr});$$

$$1 + 2 \left(\left\{ \begin{array}{ll} \lim_{y \rightarrow -1} (|1 + y| - y) & y < -1 \\ |1 + y| - y & -1 \leq y \text{ and } y < 5 \\ \lim_{y \rightarrow 5} (|1 + y| - y) & 5 \leq y \end{array} \right\} - \cos \left(\left| 1 + \left(\left\{ \begin{array}{ll} \lim_{x \rightarrow -1} (|1 + x| - x) & x < -1 \\ |1 + x| - x & -1 \leq x \text{ and } x < 5 \\ \lim_{x \rightarrow 5} (|1 + x| - x) & 5 \leq x \end{array} \right\} + y \right) - \left(\left\{ \begin{array}{ll} \lim_{x \rightarrow -1} (|1 + x| - x) & x < -1 \\ |1 + x| - x & -1 \leq x \text{ and } x < 5 \\ \lim_{x \rightarrow 5} (|1 + x| - x) & 5 \leq x \end{array} \right\} - y \right) \right| \right) \right) \quad (3)$$

$$s := \text{unapply}(\text{exprs}, x, y);$$

$$(x, y) \rightarrow 1 + 2 \text{piecewise}(y < -1, 1, -1 \leq y \text{ and } y < 5, |y + 1| - y, 5 \leq y, 1) - \cos(-|1 + \text{piecewise}(x < -1, 1, -1 \leq x \text{ and } x < 5, |x + 1| - x, 5 \leq x, 1) + y| + \text{piecewise}(x < -1, 1, -1 \leq x \text{ and } x < 5, |x + 1| - x, 5 \leq x, 1) + y) \quad (4)$$

$$\text{axl} := A - 1 : \text{bxl} := A \cdot B + B \cdot C + C \cdot A + 1 :$$

$$\text{ayl} := B - 1 : \text{byl} := A \cdot B \cdot C + 3 :$$

$$\text{ax} := \text{subs}(A=0, \text{axl}) : \text{bx} := \text{subs}(\{A=0, B=0, C=0\}, \text{bxl}) :$$

$$\text{ay} := \text{subs}(B=0, \text{ayl}) : \text{by} := \text{subs}(\{A=0, B=0, C=0\}, \text{byl}) :$$

$$\text{plot3d}(s(x, y), x = \text{ax}..\text{bx}, y = \text{ay}..\text{by}, \text{orientation} = [45, 70], \text{shading} = z, \text{axes} = \text{BOXED}, \text{labels} = [x, y, "s(x, y)"], \text{color} = x \cdot y);$$

