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grad for the points (1,3,2)

- 1 Command window
- 2 Clear
- 3 Clc
- 4 Close all
- 5 Symb z
- 6 Symb y
- 7 Symb x
- 8 $f = x^2 * y^2 * z^3 + 3 + 3 + x^2 + 1^2 * z^2$
- 9 $g = \text{gradient}(f, [x, y, z])$
- 10 Subs(g, [x, y, z], [1, 2, 3])

Output

$$f = x^2 * z^3 + x^2 * y^2 * z^2$$

$$g = \begin{matrix} y^2 * z^2 & + & 2 * z^2 * y^2 * z \\ y * x^2 * z^3 & + & 2 * y^2 * x * z^2 \\ 3 * x^2 * y^2 * z + 2 & + & 2 * x^2 * y^2 * z \end{matrix}$$

Ans - 84
32
72