



Exact Solutions > Functional Equations > Linear Functional Equations with Several Independent Variables > Jensen Equation

3. $2f(x + y) = f(2x) + f(2y)$.

Jensen equation.

Solution:

$$f(x) = C_1x + C_2,$$

where C_1 and C_2 are arbitrary constants.

Reference

Aczél, J. and Dhombres, J., *Functional Equations in Several Variables*, Cambridge Univ. Press, Cambridge, 1989.

Jensen Equation