Averaging, Gaussian Filtering, Heat Flow

$1, 2, 3$

a

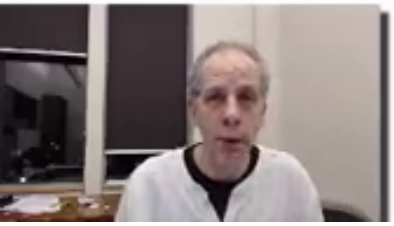
$$(a-1)^2 + (a-2)^2 + (a-3)^2$$

No

Yes - 0

Yes - 2

Yes - 4



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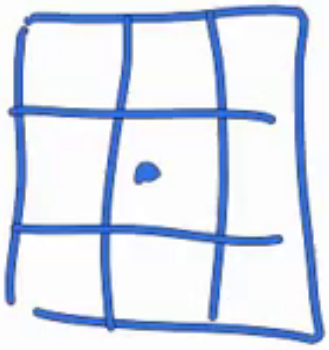
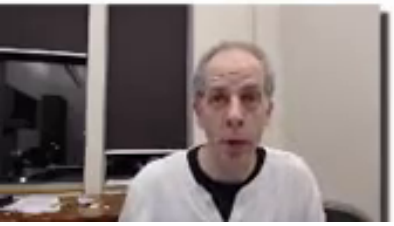
$$N = \sum_i (a - a_i)^2$$

$$a = \overline{a_i}$$





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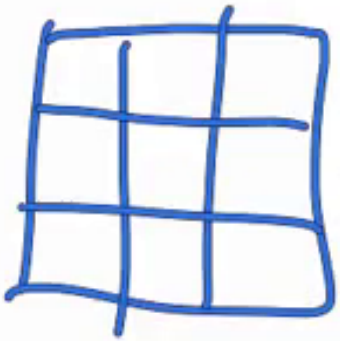
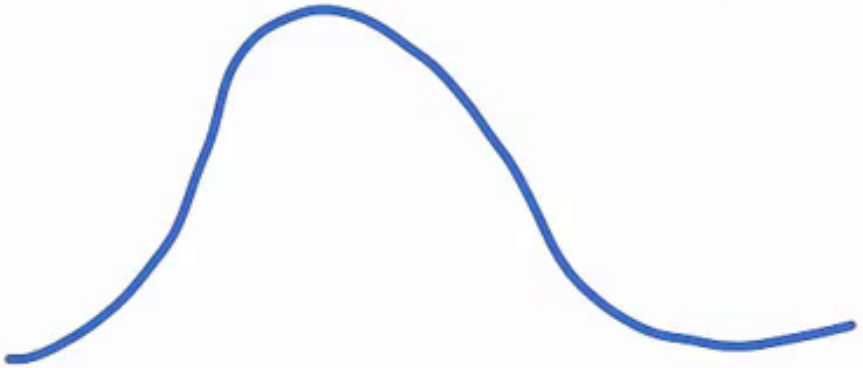
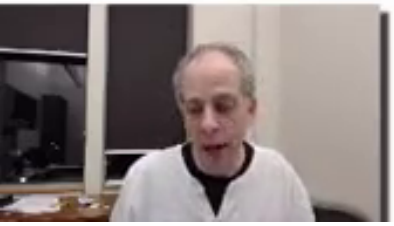


$$f(x,y;\sigma) = f(x,y) * G(0,\sigma)$$





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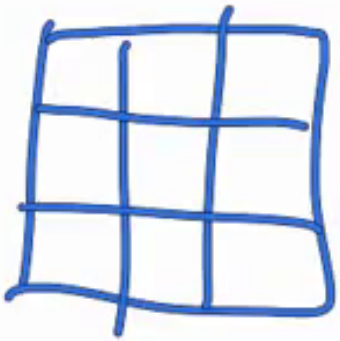

$$f(x,y,\sigma) = f(x,y) * G(0,\sigma)$$

$$\frac{df}{dt} = \Delta f = \frac{\partial^2 f}{\partial x^2} + \frac{\partial^2 f}{\partial y^2}$$