

Math 54 Worksheet 12  
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1. Find the equation of the line in  $\mathbb{R}^2$  that best fits the points

$$(0, 0), \quad (1, 1), \quad (2, 4), \quad (3, 9)$$

in the least-squares sense.

2. Find the equation of the plane in  $\mathbb{R}^3$  that best fits the points

$$(0, 0, 0), \quad (1, 0, 0), \quad (0, 1, 0), \quad (0, 0, 1)$$

in the least-squares sense.