Recitation 1 answers

August 28, 2015

Problem 1. $x_1 = -14, x_2 = 8.$

Problem 2. Yes, the plains do intersect. The point of intersection is (-2, 1, 1).

Problem 3. After row reduction one of the rows of the augmented matrix becomes [0 (2h + 4) 0]. This equation reads $(2h + 4)x_2 = 0$. It is solvable for *any value* of h since one can always take $x_2 = 0$ as a solution.

Problem 4. Any triple of parameters (g, h, k) satisfying 2g + h + k = 0 works.

Problem 5. It's a point with coordinates (-4, -7, 5).