Math 54 Worksheet 9
GSI: Lionel Levine
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1. Find a basis for the given vector space, and find its dimension..
   (a) $V = \{(x, y, z) \in \mathbb{R}^3 \mid x = 2y = -6z\}$
   (b) $W = \{(x, y, z) \in \mathbb{R}^3 \mid x + y + z = 0\}$
   (c) $W = \{(x_1, x_2, x_3, x_4, x_5) \in \mathbb{R}^5 \mid x_1 = x_2,\ x_3 + x_4 = x_5\}$
   (d) $V = \{A \in M_{32} \mid A \begin{pmatrix} 1 \\ 1 \end{pmatrix} = \begin{pmatrix} 0 \\ 0 \end{pmatrix}\}$
   (e) $V = \{p \in P_5 \mid p(x) = p(-x)\}$