Question 1)  

i. Determine whether the given subset, \( W = \{ (a, b, c, d) | a - 2b = 0, \ b, c, d \in R \} \) is a subspace of \( R^4 \).

ii. If \( W \) is a subspace of \( R^4 \), find a basis and dimension of \( W \).

Question 2)  Determine whether the set \( S = \{ (2, 0, 1, 1), \ (0, 3, 2, 1), \ (4, 2, 1, -1) \} \) spans \( R^4 \).