EXAMPLE 4 Let
$$\mathbf{v}_1 = \begin{bmatrix} -1 \\ 1 \end{bmatrix}$$
 and $\mathbf{v}_2 = \begin{bmatrix} 2 \\ 1 \end{bmatrix}$. Estimate the

linear combinations of \mathbf{v}_1 and \mathbf{v}_2 that generate \mathbf{u} and \mathbf{w} .

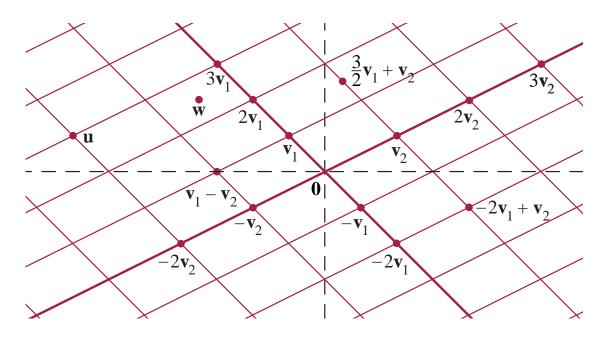


FIGURE 8 Linear combinations of v_1 and v_2 .

