lindep

1. Let $\mathbf{v} = (1, 2)$, $\mathbf{w} = (2, 4)$, $\mathbf{u} = (3, 5)$. Which sets of vectors are linearly dependent? Explain.
a. $\mathbf{v}, \mathbf{w}$ **b.** $\mathbf{v}, \mathbf{u}$ **c.** $\mathbf{w}, \mathbf{u}$

2. Let $\mathbf{v} = (1, 2)$, $\mathbf{w} = (2, 5)$, $\mathbf{u} = (3, 3)$. Are these 3 vectors linearly dependent? Explain.

3. Let $\mathbf{v} = (1, 3, 2)$. Find $\mathbf{w}$ so that $\mathbf{v}, \mathbf{w}$ are linearly dependent. Find $\mathbf{w}$ so that $\mathbf{v}, \mathbf{w}$ are linearly independent.