

Group _____ Scribe _____

Other group members _____

Group Quiz for Section 1.5

Determine which of the following are and are not subspaces of the given vector space, and justify your answers.

1. The x axis in \mathbb{R}^3 .
2. The set $\left\{ \begin{bmatrix} x \\ y \end{bmatrix} : x, y \geq 0 \right\}$ in \mathbb{R}^2 (i.e., the first quadrant of the plane).
3. The set $\left\{ \begin{bmatrix} x \\ y \end{bmatrix} : x, y \geq 0 \right\} \cup \left\{ \begin{bmatrix} x \\ y \end{bmatrix} : x, y \leq 0 \right\}$ in \mathbb{R}^2 (i.e., the first and third quadrants of the plane).