

Prove each of the following limit statements using a  $\delta - \varepsilon$  proof.

$$1. \lim_{x \rightarrow 3} (2x + 7) = 13 \quad 2. \lim_{x \rightarrow (-4)} (3x + 10) = -2 \quad 3. \lim_{x \rightarrow 4} (-5x + 14) = -6$$

$$4. \lim_{x \rightarrow (-1)} (-7x - 7) = 0 \quad 5. \lim_{x \rightarrow (-2)} (-4x - 7) = 1 \quad 6. \lim_{x \rightarrow a} (mx + b) = (ma + b)$$