

M308D HW 4 answers

Sec 3.2

28. C2 and A4 are not satisfied

Sec 3.3

20. a) Yes $\begin{bmatrix} 1 \\ 1 \\ 1 \end{bmatrix} = v + w$ b) no

40. i) a) no

ii) a) Yes b) eg. $x = \begin{bmatrix} -1 \\ -1 \\ 0 \end{bmatrix}$ c) $b = -A_1 - A_2$

Sec 3.4

28. The subsets $\{v_1, v_2\}, \{v_1, v_3\}, \{v_2, v_3\}$ are bases for R^2

36. eg. $v_1 \times v_2$ (cross product perpendicular to v_1, v_2) is not in the span $\{v_1, v_2\}$.