MATH 455: Homework 9

Problem 1. Find the norm $\|A\|_\infty$ of

$$A = \begin{bmatrix} 1 & 5 & 1 \\ -1 & 2 & -3 \\ 1 & -7 & 0 \end{bmatrix}$$

$$\|A\|_\infty = \max_{1 \le i \le n} \sum_{j=1}^{n} |a_{ij}|$$

$$= \max(1+5+1,\ 1+2+3,\ 1+7+0)$$

$$= \max(7, 6, 8)$$

$$= 8$$