HANDOUT 19

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Singular Value Decomposition

Exercise: 1. For each of the following matrices, find all singular values.

2. Find the SVD of each of the matrices.

(1) $\begin{pmatrix} 0 & 6 \\ 2 & 3 \end{pmatrix}$

(2) $\begin{pmatrix} 4 & 6 \\ 0 & 4 \end{pmatrix}$

(3) $\begin{pmatrix} 0 & 1 \\ 0 & 1 \\ 6 & 0 \end{pmatrix}$