

MATH 33A Worksheet Week 6

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Singular Value Decomposition

Just for fun: website that demonstrates an application of SVD for image compression!
<https://timbaumann.info/svd-image-compression-demo/>

Here's some SVD examples to practice before the final!

Exercise . Find the SVD for the following matrices:

(a) $\begin{bmatrix} 6 & -7 \\ 2 & 6 \end{bmatrix}$

(b) $\begin{bmatrix} 1 & 0 & 0 \\ 0 & 2 & 0 \end{bmatrix}$

(c) $\begin{bmatrix} 1 & -1 \\ 0 & 1 \\ 1 & 0 \end{bmatrix}$
