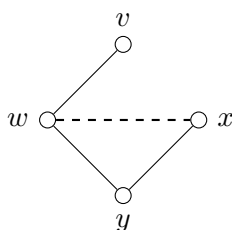


Drawing Graphs using TikZ in L^AT_EX

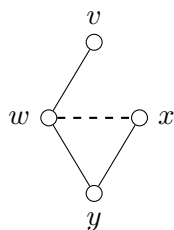
November 7, 2019

This document illustrates some ways of drawing and labeling graphs. You should read the L^AT_EX source file for this document in parallel with the resulting PDF file, so that you can see what code was used to produce each drawing. Also, note that you must add packages and definitions and so forth to the preamble (ie the stuff before the `begin{document}`) to make this work. For the next assignment (Homework 10) I have already added these.

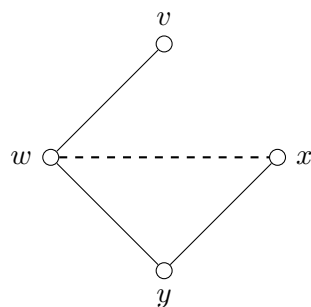
In this picture vertices are located using rectangular coordinates and the locations of the labels are



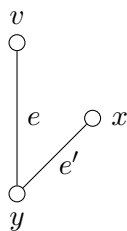
You can squish the picture in one direction:



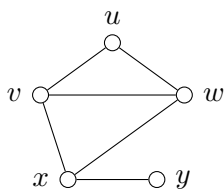
You can scale the picture:



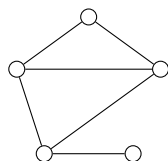
You can label edges.



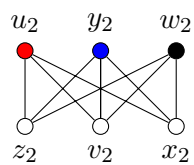
For highly symmetric drawings, it is often easier to use polar coordinates.



Leave off the labels if you want.



You can make vertices different colors.



If you are willing to adjust the names of your vertices, you can use a “for each” command to take advantage of symmetry.

