

UPDATED GENERAL INFORMATION – FEBRUARY 3, 2020

Supplements to Sutherland, Chapter 6

Here are some documents and descriptions of their contents.

<http://math.ucr.edu/~res/math145A-2017/intro2topA-06.pdf>

Although the theory of metric spaces is a convenient framework for considering many intuitive properties of the real line and the coordinate plane, one must always be careful to prove any properties that seems to be true. This file discusses one specific example of a statement which might initially seem plausible but turns out to be incorrect.

<http://math.ucr.edu/~res/math145A-2017/linear2.png>

An illustration showing how an invertible linear transformation maps the solid unit square in the coordinate plane to a solid parallelogram.

Some files for Chapter 8 contain further information on homeomorphisms. We list them below for reference.

<http://math.ucr.edu/~res/math145A-2017/Distorting%20and%20transforming%20objects%20Adobe%20Illustrator%20CC%20lyn.mp4>

<http://math.ucr.edu/~res/math145A-2017/intro2topA-08.pdf>

<http://math.ucr.edu/~res/math145A-2017/intro2topA-08a.pdf>

Additional exercises for Chapter 6

Several of the older exercises in the file <http://math.ucr.edu/~res/math145A-2017/aabNewUpdate05.145A.w20.pdf> deal with concepts from Chapter 6. Working these problems is also strongly recommended (in addition to the previously listed problems).