Topic Lists for 1-functions
Math 130 *Kovitz* Fall 2019
website location: 1-functions

Each class from Sept. 4 to Sept. 27   location 0-assumedalgebra

Review college algebra, emphasizing what might be needed for Math 130.

September 6 and 9   location: 1/1-lines

Cartesian coordinates; the midpoint formula; the distance formula; straight lines and their equations.

webpage: 00-lineformulas.pdf

September 11   location: 1/2-graphing

Curves defined by equations

webpages: 2-graphing/ graphingequations.pdf and graphingquestions.pdf
(an important checklist used throughout the course)

September 13   location: 1/3-circles

Circles (completing the square); unit circle.

webpages: Completesquarecircles.pdf and Unitcircle.pdf

September 16   location: 1/4-reflectionsandsymmetry

Reflections and symmetry (geometric). webpage: 00-reflectionsandsymmetry.pdf

Reflections and symmetry (algebraic). Reflections and symmetries of curves determined from their equations. webpage: 000-reflectionsfromeqns.pdf

September 18 and 20   location: 1/5-functions

Functions and graphs; linear functions; compute $\frac{[f(x+r)-f(x)]}{r}$.

webpage: 1/5/1-basic-definition/functgraphs.pdf

September 20   location: 1/5-functions/3-transformations

Shifts and stretches; $f(x-h)$ vs. $f(x)$.

webpages: transformations.pdf and fofxtranslated.pdf

September 23   Even and Odd Functions

webpage: 1/5-functions/4-even-and-odd/evenandodd.pdf

September 30   Test 1 on algebra. Find sample in Practicefortestorquiz/for-Test

September 25 and 27 and October 2   location: 1/6-quadratics

Graphing an equation of the form $y = a(x-h)^2 + k$.

Completing the square. webpage: 1/6/1-completing-the-square/0-completingsquare.pdf

Quadratic functions, parabolas: find the intercepts and the vertex (by completing the square) and sketch.
associated webpage: 1/6/2-graphing-parabolas/0-vertex-of-parabola.pdf

October 4   location: 1/6/3-max-min problems

Max-min word problems involving quadratic functions.
webpage: 1/6/3-quadratic-max-min-problems/maxmin.pdf

October 9 Test 2 on part 1
(covering lines, graphing, circles, reflections, symmetry, functions, difference quotient, transformations)

October 7 and October 11   location: 1/7-inverses

Composite and inverse functions.

webpage: 1/7/00-inverses-longversion.pdf

October 21 Test 3 on part 1 (covering even/odd, quadratics, max/min, composition, and inverses)

look for the sample of the test in Practicefortestorquiz/for-Test on web.