### Selected Commands in GeoGebra

Solely using tools in toolbars is not enough to fully utilize GeoGebra. There are about 500 commands available in GeoGebra. The full list is available at www.geogebra.org/manual/en/Commands. Below are some of the commands which do not appear in toolbars but may be useful in primary or secondary school contexts. Similar commands are written on the same lines and separated by commas.

### Algebra

Expand, Factor Simplify GCD, LCM

Div, Mod, Division Divisors, DivisorsList IsPrime, PrimeFactors NextPrime, PreviousPrime

Min, Max

FromBase, ToBase

MixedNumber, Rationalize

CompleteSquare

Product

#### Chart

BarChart. BoxPlot DotPlot

FrequencyPolygon FrequencyTable Histogram

StemPlot

#### Conic

Incircle

## **Function and Calculus**

Coefficients

Curve Degree Factors Function Polynomial ImplictCurve Roots, ComplexRoot

Limit

Derivatives

Integral, IntegralBetween UpperSum, LowerSum

LeftSum, RightSum

RectangleSum TrapezoidalSum

# GeoGebra

SlowPlot

AxisStepX, AxisStepY Corner

DynamicCoordinates

Geometry

Radius Perimeter

TriangleCenter

Vertex

Locus, LocusEquation

List

Append, Insert, Join Element, Take First, Last IndexOf

Intersection, Union

Flatten

RandomElement

Remove, RemoveUndefined

Reverse, Sort SelectedElement SelectedIndex Unique, Frequency Sequence

Zip

Logical CountIf

IsDefined IsInRegion IsInteger KeepIf

**Probability** 

BinomialCoefficient

nPr

RandomBetween RandomPolynomial

**Statistics** 

Sum

Mean, Median, Mode

Q1, Q3 SD, Variance Shuffle Sample

Vector and Matrix

Dimension Determinant

Invert, Transpose ReducedRowEchelonForm PerpendicularVector

UnitPerpendicularVector

Vector, UnitVector

Text

FormulaText FractionText ScientificText

SurdText. TableText Ordinal

Scripting

CenterView, Pan

RunClickScript, RunUpdateScript

SetActiveView SetAxesRatio

SetCaption, SetColor

SetFixed SetValue SetCoords

SetVisibleInView

SetTrace ShowAxes ShowGrid ShowLabel

StartAnimation UpdateConstruction

ZoomIn, ZoomOut

ParseToNumber, ParseToFunction

Execute Delete Turtle

TurtleUp, TurtleDown TurtleForward, TurtleBack TurtleLeft, TurtleRight

Repeat

3D

Surface