Review of New Features in Maple

Summary

Many of the highlighted new features in Maple 2026, as in previous releases, appear heavily correlated with earlier features of Mathematica. Furthermore, the Maple feature is often only a shallow implementation of the Mathematica functionality.

Only a small fraction of Mathematica's advances make it into Maple at all. Major feature areas of Mathematica that Maple has yet to significantly cover in a serious way include machine learning, video and image processing, audio computation, mesh geometry, finite element analysis, report generation, cloud computation, hardware connectivity, non-commutative algebra, theorem proving, spatial statistics, quadratic optimization, real-world data sources, astronomy and much more.

For those capabilities that Maple has implemented in the last 10 years, the median time lag between features being introduced in Mathematica and basic implementation in Maple has been around 11 years.

If you want access to deep implementations of the very latest in computation, you should be using Mathematica.

New Features in Maple 2026

Maple 2026	Mathematica	Notes
AI Assistant		
		Wolfram pioneered the concept of combining LLMs and computation, having created one of the initial ChatGPT plugins in 2023 and, in the same year, integrated LLMs fully into Wolfram Language.
Code generation	2024	In addition to prompt engineering, the Wolfram Notebook Code Assistant has access to the full Wolfram Language documentation and code repositories to give more reliable code generation and access your open notebooks for better understanding of your context and intent.
MCP support	2025	
Model choice	2025	As well as models provided directly by Wolfram Research, Mathematica can use your own API keys to access any available model from any 11 different AI providers and can use local models.
Document import		
Document import	2024	Wolfram Chat `Notebooks` and AI assistance and programmatic LLM tools support multimodal models, allowing you to paste an image of handwritten or printed math and ask "Extract the text and math from this image and convert to Wolfram Langauge."
Math		
Improved rsolve		The example given in the Maple 2026 marketing material as newly solved with Bessel functions was already solved by Mathematica's `RSolve` function.

Maple 2026	Mathematica	Notes
Improved GuessRecurrance		The example given in the Maple 2026 marketing material as newly solved was already solved by Mathematica's `FindSequenceFunction` function.
Strengthened reasoning under assumptions		All examples given in the Maple 2026 marketing material as Strengthened reasoning under assumptions were already solved by Mathematica's `Assuming` and `Reduce` functions.
Enhancements to simplify		All examples given in the Maple 2026 marketing material as newly simplied were already handled by Mathematica's `Full`Simplfy function.
Updates to fsolve		The example given in the Maple 2026 marketing materials of fsolve newly finding a solution and, with user assistance, finding both solutions is already fully solved by Mathematica's `NSolve` function.
Visualization		
Plotting themes	2014	While Maple supports eight themes acrosss five visualization functions, Mathematica's `PlotTheme` supports 10 primary themes and around 50 subthemes and is integrated into 300 different visualization functions.
Programming		
VectorSearch	2024	In addition to creating and searching vector databases, Mathematica also supports the direct creation and searching of semantic indexes, one of the main applications for vector database searching.
Hardware evaluation of units	2012	Mathematica has always automated the use of hardware evaluation of floating−point numbers, and the `Quantity` command has supported this from inception.
Variable type	1988	Mathematica uses the attribute `Protected` to distinguish variables from fixed symbols.
Filename generation	2021	A similar solution is provided by `ResourceFunction`["`FileNameWithDate`"].
Packages distributed with workbooks	2020	Mathematica's paclet functionality allows complex distributions including palettes, stylesheets, data, file resources and more, together with notebooks and code.
Incremental functionality update	2014	Mathematica's paclet mechanism supports automatic and manual versioned updates of data, palettes, stylesheets and notebook content as well as functionality. Since 2020, the paclet mechanism has been available to users to distribute and deliver updates to their own applications. Since 2024, Wolfram has hosted a Paclet Repository (https://resources.wolframcloud.com/PacletRepository) that enables users to submit their own packages to be maintained and delivered from Wolfram servers. It currently hosts over 250 paclets.
Flexible type checking	1988	One of the key benefits of Mathematica's pattern−matching capabilities has always been to provide rich argument matching in function definitions, but also extends to rich symbolic transformation and content extraction.
Improvements in SumTools	2014	Mathematica has a general mechanism for handling inert expressions and does not treat inert Sum expressions differently. As such, the new Maple commands GetSummand, GetRange and getVariable are equivalent to simply taking the first or second parts the Unactivated[Sum[..]]] expression.

Developments in Maple 2026 that do not appear to be following Mathematica developments include educational grading feedback and problem generation and enhancements to existing functionality.

New Features in Maple 2025

Maple 2025	Mathematica	Notes
Math		
Simplify improvements	1996	The Mathematica `FullSimplify` command has supported simplification of exponential functions since its creation. All but one of the examples in the Maple 2025 marketing literature were already simplified by Mathematica.
Sum convergence criterion	2008	Implemented in Mathematica as `GenerateConditions`.
Numeric Inverse Laplace	2019	Available in Mathematica as `ResourceFunction["NInverseLaplaceTransform"]`.
Solve equations using abs	2003	The example given in the Maple 2025 marketing literature is already solved by Mathematica.
Custom verification tests	2014	Supported by the option `SameTest` for the Mathematica function `VerificationTest`.
max and min support units	2012	The Mathematica `Quantity` object was deeply integrated into relevant functions from its inception, including Min and Max.
fsolve accepts lists	1988	Mathematica's `Solve` command has always accepted equations using either logical combinations or lists.
Round to custom increment	1996	Mathematica's `Round`, `Ceiling` and `Floor` functions all support a custom rounding interval.
Identify an integer sequence	2008	Implemented in Mathematica as `FindSequenceFunction`.
Compare	2024	Implemented in Mathematica as `Diff`. Mathematica can compare documents as well as expressions and can also perform three–way diffs.
Step–by–step transpose	2010	Mathematica's broad range of Wolfram|Alpha–powered "step–by–step" solvers already includes `Transpose`.
Graphs		
AllSimplePaths	2014	Implemented in Mathematica as `FindPath`.
Ancestors	2010	Implemented in Mathematica as `VertexInComponent`.
Descendents	2010	Implemented in Mathematica as `VertexOutComponent`.
FindCycle	2014	Implemented in Mathematica as `FindCycle`.
LongestPath	2020	Available in Mathematica as `ResourceFunction["FindLongestPath"]`.
Maximum path length for IsReachable and Reachable	2010	The equivalent functions in Mathematica, `GraphDistance` and `NeighborhoodGraph`, have always allowed maximum and specific path length constraints.

Maple 2025	Mathematica	Notes
LowestCommon Ancestors, ShortestAncestralPath, ShortestDescendantPath	2025	Available in Mathematica as `ResourceFunction["CommonConnectedComponents"]`.
IsCaterpillarTree	2025	Available in Mathematica as `ResourceFunction["CaterpillarTreeQ"]`.
IsPlatonicGraph	2012	Trivially implemented in Mathematica as `Function[{graph},AnyTrue[GraphData["Platonic"],IsomorphicGraphQ[graph,GraphData[#]]&]]`.
ResistanceDistance	2023	Available in Mathematica as `ResourceFunction["ResistanceMatrix"]`.
New special graphs	2007	Mathematica's `GraphData` database has grown steadily since its creation in 2006. In the last year, as Maple added two new special graphs, `GraphData` has grown by around 1000 special graphs to over 12000, including the two now added to Maple.
New Interface		
Ribbon interface	2007	Mathematica provides user–customizable toolbar interface construction via the `DockedCells` option. Any menu action or computation can be accessed via such a custom ribbon interface. `DockedCells` is available on Mac as well as Windows and Linux.
Multiple autocomplete suggestions	2014	
Autocomplete user variables	2007	
Interactive column width adjustment	2020	Available in Mathematica via `TableView` or `Tabular`.
User interface construction		
Collapsible section	2007	Implemented in Mathematica as `OpenerView`. In Mathematica, interactive user interface elements can be used anywhere in document contents, including inside graphics. They are not limited to special "canvas" areas.
Checkbox actions	2007	Nearly all of Mathematica's interactive interface elements can be set to perform arbitrary side–effect actions when changed.
Visible property for checkboxes	2007	In Mathematica, `PaneSelector` can be used to dynamically hide any content, not just checkboxes.
plotsize	1988	All graphics in Mathematica have PlotSize controls in absolute size or as a proportion of available space. These size controls have always been respected in dynamic interfaces and Mathematica's `QuestionObject`, just as they are in static output or export.
Visualization		
Units support in plot	2012	Nearly all Mathematica graphics supported `Quantity` at its introduction.
Custom ranges for contour plots	2004	Implemented in Mathematica as `DataRange` and supported across a range of plot types, not just `ListContourPlot`.

Maple 2025	Mathematica	Notes
Sparse array support in MatrixPlot	2007	Mathematica's `MatrixPlot` automatically handles `SparseArray` arguments without the user having to specify a special method.
Programming		
Vector assignments	1988	The ability to assign a vector of values to a vector of variables was part of the original design of Mathematica. Mathematica also allows assignment to matrices of variables or tensors of variables to arbitrary depth.
Lexicographic sorting	2021	Implemented in Mathematica as `LexicographicSort`.
Ascending or descending sort	2017	Implemented in Mathematica as `ReverseSort`.
LaTeX conversion	2004	Implemented in Mathematica as `ImportString`.
Deleting arrays to end	2007	Implemented in Mathematica as `Span`. `Span` also supports operations to a specific number of elements from the end, not just the final one.
Decode HTML entity names	2010	Implemented in Mathematica as `ImportString`.
Import Markdown	2024	Available in Mathematica as `ResourceFunction["ImportMarkdownString"]`.
AI		
AI document content generation	2024	Mathematica also provides custom tool calling from AI, including execution of generated or pre–written Wolfram Language code and the ability to customize AI personas.

Developments in Maple 2025 that do not appear to be following Mathematica developments include work in posets, constraint case discussion and curved spacetime coordinates in physics calculations.

In the same period, Wolfram has released both Mathematica 14.1 and Mathematica 14.2, containing over 450 new or substantially improved functions.

New Features in Maple 2024

Maple 2024	Mathematica	Notes
Math		
Symbolic summation	1996	All five examples of the Maple launch announcement are already solved by Mathematica.
Simplify improvements	1996	Mathematica's `FullSimplify` has always been able to automatically simplify mixtures of many kinds of functions, including those that Maple now handles (trigonometric, hyperbolic, `Log`, `Sign`, `Binomial`, `Beta` and `Gamma` functions).
Multivariate complex root finding	2014	The example given in the Maple announcement is already solved by Mathematica's `NSolve` command.

Maple 2024	Mathematica	Notes
Parameterized equation solving	2003	
Graphs		
Shortest path and distance on weighted graphs	2010	
IsArchemedianGraph	2010	This is just a specific case of `IsomorphicGraphQ` and can be implemented as `Function[gr,AnyTrue[GraphData["Archimedean"],IsomorphicGraphQ[#,gr]&]`.
IsDominatingSet	2010	This is a specific applicaton of Mathematica's `AdjacencyList` and can be implemented as `Function[{gr,v}, AdjacencyList[gr,v] === v]`.
MinCut returns cut set	2012	Mathematica's `FindMinimumCut` returns both the minimum and the cut set together.
Graph condensation	2024	Available in Mathematica as `ResourceFunction["CondenseGraph"]`.
MoralGraph	2024	Available in Mathematica as `ResourceFunction["MoralizeGraph"]`.
RelationGraph	2015	Implemented in Mathematica as `RelationGraph`.
WienerIndex	2010	Available in Mathematica as a property to `GraphData` or as `ResourceFunction["WienerIndex"]`. The one example given in the Maple marketing materials of WienerIndex(CycleGraph(20)) is incorrect. The correct value is 1000, not 40 as stated.
MaxFlow works on unweighted graphs	2012	Mathematica's `FindMaximumFlow` command has always worked on all graph types.
Addition special graphs	2007	Mathematica's `GraphData` now contains more than 11,000 special graphs, including the Wagner, ladder and the Archimedian graphs now added to Maple.
Units		
Statistics functions work with units	2012	Mathematica's `Quantity` function has always been deeply integrated with other functions, including statistics operations.
Arrays with units	2015	Mathematica provides the `QuantityArray` command for efficient handling of arrays with common units.
IntegrateData supports units	2012	Units have always been supported in Mathematica's `Interpolation` and `TimeSeries` functions.
IntegrateData supports running totals	2007	Implemented in Mathematica as `Accumulate`.
Programming		
Series conversion to polynomial	1988	Implemented in Mathematica as `Normal`.

Maple 2024	Mathematica	Notes
Mapping over elements of an array, elementwise	1988	Mathematica provides a general mechanism, `Listable`, to specify any function to automatically map over lists and arrays. Most single–argument functions that do not have a list or matrix meaning are already set to do this by default.
User Interface		
Open more than one help page at a time	1996	
AI assistant	2023	Mathematica integrates its AI assistant directly into the notebook environment rather than as a dialog box. This allows AI to be a natural part of your workflow. Prompts and outputs are part of your recorded work and reproducible in future sessions. An extensible choice of personas is available for both beginner or expert and fully customizable for specialist tasks. The AI can execute code that it generates or custom tools. User code can access the AI through the commands `LLMSynthesize`, `LLMFunction`, `LLMExampleFunction`, `LLMTool` and `ChatEvaluate`, with full control over AI provider, prompt engineering, compuational tools and model parameters.
Scroll large matrices	2020	Implemented in Mathematica as `TableView`.
Autocomplete templates	1996	
Strikethrough text	1996	
Change font for code	1996	
Visualization		
Customizable color bars	2012	
Display discontinuities for piecewise functions	1996	Mathematica also automatically displays discontinuities for non–piecewise functions.
Dynamic plot range in interactive plot	1996	Mathematica's `Manipulate` command has always supported `PlotRange` to choose to fix or adapt plot ranges as interactive parameters change.
Custom color schemes	2007	Mathematica's `Blend` command together with `ColorData` and other color computations allow a custom color function to be applied to any combination of dependent and independant variables in all of Mathemtica's visualization routines. Multiple color spaces are supported as well as alpha channel.
Complex phase plots	2019	
3D complex phase plots	2019	
Pyramids	2014	
Education		
Show steps	2010	Mathematica integrates Wolfram|Alpha step–by–step solutions directly into the Mathematica notebook. Start a Wolfram|Alpha cell and type "show steps…" to access it. Partial fractions and equation solving that Maple now supports are just two of the many math, physics and chemistry problems that Mathematica can help explain.
New math apps: Tangent to a plan	2011	The Wolfram Demonstrations Project now contains over 13,000 apps. Tangent to a plane is just one of them.

Maple 2024	Mathematica	Notes
New math apps: Golden angles	2011	The Wolfram Demonstrations Project contains several demonstrations that explore golden angles.
Non–rectangular layout in apps	2007	Implemented in Mathematica as `SpanFromLeft`, `SpanFromAbove`, `SpanFromBoth`, `AdjustmentBox`, `Inset` or `Overlay`.

Developments in Maple 2024 that do not appear to be following Mathematica developments include work in matroids, hypergraphs and asteroidal triples. In the same period, Wolfram has released both Mathematica 13.3 and Mathematica 14.

New Features in Maple 2023

Maple 2023	Mathematica	Notes
Math		
Improved integration		The examples given in Maple marketing literature of integrals now solved with compact results or the correct handling of assumptions are all already optimally solved by Mathematica.
Support for elementwise matrix relations in Solve	1988	
High dimension polyhedral sets	2014	Mathematica's `Region` framework is not limited to polyhedral regions.
IntegerHull	2022	Available in Mathematica as `ResourceFunction["IntegerConvexHullMesh"]`.
Multivariate Puiseux series	2020	
Quantifier elimination	2003	Implemented in Mathematica as `Reduce`, `ForAll` and `Exists`.
Visualization		
Color bars for contour and density plots	2008	Mathematica provides a general primitives `BarLegend`, `SwatchLegend`, `LineLegend`, `PointLegend` that can be applied to any visualization, not just `ContourPlot` and `DensityPlot`.
Additional color maps	2007	Mathematica's `ColorData` function provides 175 predefined color schemes for indexed or continuous palettes and also supports scaling and reversal.
Support for color maps in densityplot, contourplot and deplot	1988	Nearly all Mathematica visualizations support color maps to adjust their appearance.
Coding tools		
Open code files in Worksheet editor	1988	Mathematica has always been able to open code text files in its notebook editor, where a much richer collection of code editing tools are supported than the Maple Worksheet editor (see the Comparison of Ease–of–Use Features).

Maple 2023	Mathematica	Notes
Code edit region improvements		Beacause Mathematica does not have a seperate code edit region, the code editing tools in Mathematica notebooks apply to all input. Tools include those now supported in Maple: palette–based command entry, units entry, code execution, search and replace.
Python language support	2017	Mathematica notebooks support cells that execute SQL, R, Julia, Octave, Ruby, NodeJS, shell scripts as well as Python. Code execution in these lanagues is also available programmatically via the command `ExternalEvaluate`.
Interface		
Hyperlinks to help pages	2007	
Open multiple help pages	2007	
Primed variables	2007	While Mathematica does not choose to allow alternative interpretations of ASCII 39, primed variables are supported via Unicode 2032 and there is a general mechanism for using variables with `OverDot`, `OverBar` or `Overscript` appearance, either as variables or functions.
Style canvas elements	2007	Mathematica implements canvas–based interfaces using `Graphics` and `Inset`. These support any kind of content that can be rendered by the Mathematica notebook, including `FontSize`, `FontColor` and `Background` color now supported by Maple.
Quiz building	2021	Mathematica provides quiz building tools via the menu "New/Programmatic Notebook/Question Notebook Authoring" or the command `CreateNotebook["QuestionNotebook"]`
Step–by–step solutions	2010	Mathematica's built–in use of Wolfram|Alpha provides step–by–step solutions to many math, engineering and science tasks, including implicit differentiation, completing the square and long division, that are only now supported by Maple. To access step–by–step solutions in Mathematica, start your input with == and click the "Step–by–step solution" button in the output.
Graph theory		
Travelling saleseman on weighted graphs	2007	Implemented in Mathematica as `FindShortestTour` and `FindShortestPath`.
Multigraph support	2010	
GraphProduct	2022	Mathematica supports six forms of `GraphProduct` compared to four in Maple.
Additional special graphs	2007	Mathematica's `GraphData` command supports over 10,000 special graphs compared to the 119 that Maple now supports, including Hamming, house and windmill graphs.
Signal processing		
Quantize	2007	The different applications of this Maple utility function can be acheived in Mathematica with `Clip`, `Round` or `Nearest`.
SavitzkyGolayFilter	2014	Implemented in Mathematica as `SavitzkyGolayMatrix`.
Padding options for Convolve	1999	Mathematica's `ListConvolve` command supports arbitrary padding and centering values. It is not limited to the three named choices in Maple.
Padding and truncation for FFT	2014	Mathematica's `Fourier` supports the generation of specific terms. `ArrayResample` or `PadRight` can be used to pad lists to lengths that are powers of 2 that the new Maple option supports.

Maple 2023	Mathematica	Notes
Apple Silicon support for signal processing operations	2021	Mathematica is fully Apple Silicon native.
Programming		
SortBy for arrays	2007	Mathematica's `SortBy` command can sort any expression by any comparator. It is not limited to rows or columns of rectangular arrays as the Maple command is.
IsSubsequence	2023	Implemented in Mathematica as `ResourceFunction["ContainsOrderedItemsQ"]`.
HSL, HSV color support	2019	Mathematica's `"Color" Entity` also supports HTML and Pantone color names, CIE 1976, Hunter 1948 Lab, CMYK, HSB, XYZ, Lab, LCH and LUV color spaces.
InversePerumutation	2010	Implemented in Mathematica as `InversePermutation`.
Support for 2022 SI prefixes	2022	
RealBox and ComplexBox support inverse trigonometric functions	2021	Implemented in Mathematica as `CenteredInterval`.
Test whether a vector or matrix is a given type	1988	The Mathematica commands `MatrixQ` and `VectorQ` are not limited just to types but can apply arbitrary tests to elements.
Connect from Python	2019	Implemented as the Wolfram Client Library for Python.

Developments in Maple 2023 that do not appear to be following Mathematica developments include work in algebraic physics, ZPolyhedral sets, perceptual color space support and OpenAPI support.

New Features in Maple 2022

Maple 2022	Mathematica	Notes
Interface		
Customizable tooltips for hyperlinks	2007	Tooltips can be added to anything in Mathematica, not just hyperlinks. Unlike Maple, they can contain images, math or other content, not just text.
Linking to local bookmarks	1996	Mathematica hyperlinks can target specific cells in same notebook, another local notebook or a notebook on a remote website using the `CellTags` option. They can also target help pages or specific cells in help page, Wolfram Cloud notebooks or webpages.
Better zoom in the help system	1996	Mathematica's help system has consistently applied zoom to help pages, guide pages, turorials and the master index since its creation.
Keyboard shortcut to navigate to help search	1996	

Maple 2022	Mathematica	Notes
Advanced math		
Power series of non–polynomial expressions	1988	The examples given as newly solved in Maple 2022 release announcments were already solved by Mathematica.
Closed–form formal power series	1996–2008	The examples given as newly solved in Maple 2022 release announcments were already solved by Mathematica's `SeriesCoefficient` function.
Search a matrix row/column	1988	Mathematica's `Select` and `Cases` commands provide the same functionality but are not limited to searching rectangular arrays. The same functions can be used to search heirarchical data, mathematical expressions, documents or anything else that is expressible in the Wolfram Language.
Improved integraton		Independent tests have demonstrated Mathematica's strong lead over Maple for integration problems (see `https://www.12000.org/my_notes/CAS_integration_tests/index.htm`). All of the integrals and integral transforms that are listed as newly solved by Maple 2022 in the release announcement were already solved by Mathematica.
Improved simplification		Independent tests have demonstrated Mathematica's strong lead over Maple for simplification problems (see `https://www.12000.org/my_notes/simplification_in_CAS/index.htm`). The examples of improved simplifcation of trigonometric, log and piecewise functions and constants that are listed as newly solved by Maple 2022 in the release announcement were already solved by Mathematica.
Improved inflection points	2019	In the Maple 2022 release announcment, an example is given for finding inflection points of (1+sin(x))^cos(x). However, Maple solves this over a small finite interval and two of the results returned are approximate. The Mathematica function `ResourceFunction["InflectionPoints"]` solves this problem with exact results and a general formula for the infinite periodic sequence of values.
RealBox, ComplexBox	2021	Implemented in Mathematica as `CenteredInterval`.
Traverse	2010	Available in Mathematica as `DepthFirstScan` and `BreadthFirstScan`. Much richer control is available for trees using `TreeTraversalOrder`.
CompleteKary Arborescence	2010	Available in Mathematica as `CompleteKaryTree`.
IsPerfectGraph	2005	Implemented in Mathematica as `PerfectQ`.
IsSimplical	2010	Implemented in Mathematica as `SimpleGraphQ`.
IsChordal	2022	Available in Mathematica as `ResourceFunction["ChordalGraphQ"]`.
IsOriented	2022	Available in Mathematica as `ResourceFunction["OrientedGraphQ"]`.
IntegerHull	2022	Available in Mathematica as `ResourceFunction["IntegerConvexHullMesh"]`.
Visualization		
Discontinuity detection in 2D plots	2007	Mathematica automatically detects discontinuities in both 2D and 3D plots.

Maple 2022	Mathematica	Notes
Recompute plot on zoom	2018	Available in Mathematica as `ResourceFunction["DragZoomPlot"]`.
Named color schemes	2007	Mathematica has 175 built–in color schemes supporting both indexed and smooth transition schemes.
Custom color schemes	2007	Available in Mathematica as `Blend`.
Stacked histograms	2008	Mathematica's `Histogram` supports `"Grouped"`, `"Stepped"` and `"Percentile"` layouts as well as `"Stacked"`. It also supports multiple histograms with common axes in the same plot or in a row, column or grid layout.
Alternate convension for spherical coordinates	2012	Mathematica's `CoordinateTransform` and `CoordinateTransformData` functions support 175 different coordinate transformations.
Thermophysical data		
Gibbs free energy	2014	Mathematica's `ThermodynamicData` command supports 69 different thermodynamic properties of chemicals including the Gibbs free energy property that is now supported by Maple.
Signal processing		
Signal generation	2016	Mathematica's `AudioGenerator` function includes support for six standard oscillators and seven standard noise types, as well as support for models using functions, time series or random processes.
DynamicTimeWarping	2015	Supported in Mathematica as `WarpingCorrespondence` and `WarpingDistance`.
DifferentiateData	1991	Mathematica's `Interpolation` function is differentiable and can accept multidimensional data with explicit or implicit indexing. The spectral method is available through the function `ResourceFunction["ListD"]`.
IntegrateData, IntegrateData2D	1991	Mathematica's `Interpolation` function is integratable and is not limited to one or two dimensions. It accepts explicit or implicitly indexed data.
Insert one signal into another	2014	Available in Mathematica as `TimeSeriesInsert`, `AudioInsert` and `VideoInsert`.
FindPeakPoints returns indices	2014	Mathematica's `FindPeaks` returns both values and indices.
Units		
Piecewise suport for units	2012	
Performance improvements for units		Maple does have an equivalent to Mathematica's `QuantityArray`, which allows unit–based computation on very large datasets without the overhead of repeated identical conversions.
Step–by–step solutions		
Show simplification steps	2010	All Wolfram|Alpha Pro functionality is available from within Mathematica notebooks, including its step–by–step tutors.

Maple 2022	Mathematica	Notes
Creating and sharing interactive content		
Canvas scripting	2007	While the Mathematica `Graphics` object has supported all of the features now supported by Maple's `Canvas` object, this is only a special case of the wider support for scripting notebooks. Any content of Mathematica notebooks can be created, updated or analyzed programmatically. A notebook can be deployed to the cloud, in whole or in part, where the same interactivity is supported as on the desktop. Furthermore, Mathematica notebooks can be shared and edited in the cloud to enable collaboration.
Plot supports on–click events	2007	Mathematica's `EventHandler` function is not limited to use within `Graphics`. Any visible content can have programs attached to mouse or keyboard events. `EventHandler` is also not limited only to on–click but also supports double–click, right–click, mouseover or mouse–dragged events.
Hidden state information	2007	Mathematica's `DynamicModule` supports hidden state with any kind of argument, not just strings or numbers.
Print layout		
Show page boundaries	1996	
Set page breaks	1996	
Prevent breaks within content	1996	As well as allowing the specification that page breaks should not happen within content, Mathematica also allows the user to specify that breaks should not happen immediately before or immediately after content, for example, to prevent a title appearing at the bottom of a page.
Create well–proportioned tables and plots	1996	As well as providing interactive adjustment of plots and tables, Mathematica supports the programmatic specification of graphic, table, column and font sizes using proportions of available space as well as absolute size.
Connectivity		
Use Maple as a Jupyter engine	2018	Available from `https://github.com/WolframResearch/WolframLanguageForJupyter`.
SMTLIB support		SMT to Mathematica conversion is supported by the third–party Tarski package `https://modelwriter.github.io/Tarski`.
Convert objects to TensorFlow	2020	Mathematica supports import and export of ONNX files, which are supported by a range of libraries incuding TensorFlow.
Indexing DeepLearning tensors	2020	Mathematica has a full symbolic representation of neural networks, making it possible to analyze, create or transform networks, in arbitrary ways, not just via access to the tensors involved. The Mathematica command `NetExtract` can read any learnable parameter from any layer of a network including the weights and biases tensors.
GradientTape	2017	Mathematica's `TrainingProgressFunction` option for its `NetTrain` command allows an arbitrary function to be executed during training, making any aspect of the training observable, not just gradients.
Two–dimesional barcode generation	2014	Mathematica's `BarcodeImage` command supports UPC, EAN8, EAN13, Code39, Code128, ITF, Codebar, Aztec and Datamatrix 1D and 2D barcodes as well as the QR code now supported by Maple. Mathematica can also extract barcode data from images using the funcation `BarcodeRecognize`.

Maple 2022	Mathematica	Notes
Convert data from strings or byte arrays	1999	Mathematica's `ImportString` and `ImportByteArray` functions can convert between string or byte data and over 240 different formats.
Multipart form data	2014	Mathematica's `HTTPRequestData` gives full support to HTTP interactions, including multipart elements.

Developments in Maple 2022 that do not appear to be following Mathematica developments include work in algebraic physics and root finding.

New Features in Maple 2021

Maple 2021	Mathematica	Notes
Language and programming		
DEQueue	2020	Efficient double queues are implemented in Mathematica as `DataStructure["Dequeue"]`. `DataStructure` supports more than 20 additional specialized data structures with optimized supporting operations.
Multilevel break statements	1988	Implemented in Mathematica as `Throw` and `Catch`.
Interfaces with an indeterminate number of input fields	2014	Implemented in Mathematica as part of `FormObject`.
Generate evenly spaced sequences	2015	Implemented in Mathematica as `Subdivide`.
IsMonotonicQ	1988	Implemented in Mathematica as `OrderedQ`.
PersistentTable	2017	Mathematica's `PersistentObject` is not limited to table–like structures and provides control over the duration of the persistence and supports both local and cloud–based storage.
DataFrame indices and entries	2014	Mathematica's `Dataset` is not limited to rectangular two–dimensional data and has always supported equivalent functionality using the commands `Keys` and `Values`.
Units:–Split	2012	Implemented in Mathematica as `QuantityMagnitude` and `QuantityUnit`.
Limit information returned by Trace	1991	Mathematica's `Trace` command supports an arbitrary pattern for filtering returned information.
Math		
Multivariate limits		Examples given as newly solved in Maple are already solved in Mathematica.
Vectorized ODEs	1999	
Series expansion of log integral		`LogIntegral` was originally included in Mathematica in 1988 and is supported by `Series`.

Maple 2021	Mathematica	Notes
GuessRecurrence	2008	Implemented in Mathematica as `FindSequenceFunction`.
MinimalRecurrence	2008	Implemented in Mathematica as `FindLinearRecurrence`.
Simplifications of LambertW	1996	The examples shown as new in the Maple 2021 announcement are already simplified in Mathematica. Implemented in Mathematica as `ProductLog`.
MatrixAdd, VectorAdd	1988	Because Mathematica automatically supports vectorized operations when appropriate, there is no need for such commands.
New differential equation solutions		Four of the five new examples shown in the release announcement produce solutions in Mathematica.
Multivariate CoefficientVector	2015	Implemented in Mathematica as `CoefficientList`.
EgoGraph	2010	Implemented in Mathematica as `NeighborhoodGraph`.
GraphDensity	2012	Implemented as `GraphDensity`.
Newick	2021	Available in Mathematica as `ResourceFunction["ExportNewickString"]`.
PrueferCode	2012	Implemented in Mathematica as `LabeledTreeToCode`.
SpanningForest	2014	Implemented in Mathematica as `FindSpanningTree`.
BipartiteMatch supports weighted graphs	2012	Implemented as `FindMaximumFlow`.
Additional special graphs	2007+	Mathematica's `GraphData` now supports 8349 special graphis compared to 113 supported by Maple, including the 16 added in this release of Maple.
Visualization		
Automatic domain choice for plots	2010	Using Wolfram|Alpha's computational intelligence, Mathematica has been able to choose domains based on features such as asymptotes, roots, and maxima and minima. This feature was first trialled in Wolfram's CalculationCenter product in 2001.
Units in point plots and polygon plots	2012	Mathematica's units are supported in most plot types, not just the two that Maple now supports.
Arrow respects scale	2007	Mathematic's `Arrow` primitive has always taken scale into account for its head shape. The same is true for lines with beveled or round ends, neither of which are currently supported in Maple. Mathematica also gives full control over `ArrowHead` numbers, position, size and style.
Deep learning		Mathematica provides 56 neural network layer types compared to the nine now supported in Maple. Mathematica allows composition of layers in an arbitrary graph, not just through the linear chain supported by Maple.
EmbeddingLayer	2016	Implemented as `EmbeddingLayer`.
ConvolutionLayer	2016	Implemented as `ConvolutionLayer`.
DenseLayer	2016	Implemented as `LinearLayer`.

Maple 2021	Mathematica	Notes
DropoutLayer	2016	Implemented as `DropoutLayer`.
EmbeddingLayer	2016	Implemented as `EmbeddingLayer`.
FlattenLayer	2016	Implemented as `FlattenLayer`.
GatedRecurrentUnitLayer	2017	Implemented as `GatedRecurrentLayer`.
LongShortTermMemory Layer	2017	Implemented as `LongShortTermMemoryLayer`.
MaxPoolLayer	2016	Implemented as `PoolingLayer`.
Sequential	2016	Implemented as `NetChain`.
Interface		
Non–executable math in text	1996	Mathematica has always assumed that math embedded in text should not be executable by default.
Display multiplication in scientific notation	1996	As well as automatically displaying the times symbol in scientific notation, Mathematica allows the user to decide the character to be used in this and other implied multiplication situations.
Warning messages for **e** and **d** can be suppressed	1988	All evaluation warnings in Mathematica can be individually or collectively suppressed.
Copy selection as LaTeX	1996	
Enter LaTeX	1996	Since 1996, it has been possible to paste LaTeX for automatic translation into Mathematica typesetting. Since 2020, Mathematica has held the original LaTeX in the notebook for later editing, rendering it in real time for display.
Export to LaTeX	1996	
latex command	1988	Implemented in Mathematica as `TeXForm`.
Student packages		
Step–by–step solutions: equation solving, factoring polynomials and long division	2009	All Wolfram|Alpha step–by–step solutions are available within Mathematica, including algebra. Mathematica supports step–by–step solutions for many problem types not supported by Maple, including linear algebra, discrete math, physics formulas, statistics, geometry, chemistry equations and proofs.
Step–by–step solutions: ODEs	2012	All Wolfram|Alpha step–by–step solutions are available within Mathematica, including differential equations.
Study guides in Maple		Wolfram doesn't put study materials inside Mathematica but provides them, free of charge, through Wolfram U.
Signal and image processing		
Short–time Fourier transforms	2019	Implemented as `ShortTimeFourier`.

Maple 2021	Mathematica	Notes
BandPower, MeanFrequency and SpectralEntropy	2016	Implemented in Mathematica as `AudioMeasurements`.
ShortTimeBandPower, ShortTimeMean Frequency and Short TimeSpectralEntropy	2016	Implemented in Mathematica as `AudioLocalMeasurements`.
SampleImage	2007	Test images and other sample data are provided by the command `ExampleData`. In addition, Mathematica provides commands such as `WebImageSearch` and thousands of `Entity` objects that include an "`Image`" property.
Welch	2012	Implemented in Mathematica within `Periodogram`.
Hampel	2021	Available in Mathematica as `ResourceFunction["HampelFilter"]`.
PowerSpectrum accepts signals	2012	Mathematica's `PeriodogramArray` command accepts signal data and can also be applied to directly to `Audio` and `Image` data.
Thermophysical data		
Thermophysical data	2014	Implemented in Mathematica as `StandardAtmosphereData`.
Quantum chemistry (additional purchase)		Mathematica provides chemistry functionality without the need for additional purchases.
MolecularDictionary	2007	Implemented in Mathematica as `ChemicalData`.
PlotMolecule	2007	Implemented in Mathematica as `MoleculePlot`.
MolecularGeometry	2019	Implemented in Mathematica as `Molecule`.

Developments in Maple 2021 that do not appear to be following Mathematica developments include work in algebraic physics.

New Features in Maple 2020

Maple 2020	Mathematica	Notes
Graph theory		
Betweenness centrality	2010	Implemented in Mathematica as `BetweennessCentrality`. Mathematica supports 12 different centrality measures while Maple now supports only 8.
Closeness centrality	2010	Implemented in Mathematica as `ClosenessCentrality`.
Degree centrality	2010	Implemented in Mathematica as `DegreeCentrality`.
Eigenvector centrality	2010	Implemented in Mathematica as `EigenvectorCentrality`.

Maple 2020	Mathematica	Notes
Katz centrality	2010	Implemented in Mathematica as `KatzCentrality`.
Page–rank centrality	2010	Implemented in Mathematica as `PageRankCentrality`.
Graph styling control	2014	As well as controlling style choices for edges and vertices, Mathematica can use arbitrary shape functions for either of these, allowing any kind of visual representation.
Graph self loops	2010	Mathematica's `Graph` object has always supported self–loops. Finding and counting self–loops is just a special case of finding edges that match a given pattern and can be acheived with `EdgeList`[graph,(x_⟷x_)|(x_⟷x_)]. By changing this pattern, Mathematica can distinguish between directed and undirected self–loops, which Maple's commands do not.
Geometric graphs	2020	Mathematica's `MeshConnectivityGraph` command can generate graphs of the connectivity of any subdimension of any dimensional mesh geometry.
Contract subgraphs	2014	Implemented in Mathematica as `VertexContract`.
Special graphs	2007	Mathematica includes support for over 8000 special graphs, including all 18 recently added to Maple. Even now, Maple supports only 97.
Nearest and farthest neighbor graphs	2015	Implemented in Mathematica as `NearestNeighborGraph`.
Sphere–of–influence graph	2015	Implemented in Mathematica as `NearestNeighborGraph`.
Math		
Assumptions can include Or	2007	
Quantified elimination over reals	2003	Implemented in Mathematica as `Reduce`, `ForAll` and `Exists`.
Series of WhittakerM, WhittakerW	2007	
Series of KummerM, KummerU	1988	Implemented in Mathematica as `Hypergeometric1F1`.
PointInPolygon	2014	Mathematica's function `RegionMember` tests whether a point in any–dimensional space is within regions defined by a collection of region primitives and derived regions. It is not limited to polygon primitives in 2D space as Maple is.
MinPoly	2007	Implemented in Mathematica as `MinimalPolynomial`.
JacobiP with negative arguments	1988	
JordanTotient	2008	This is a trivial combination of the Mathematica commands `DivisorSum` and `MoebiusMu`.
Simplification		Most new examples of simplificaton from Maple 2020 marketing materials were already simplified in Mathematica.

Maple 2020	Mathematica	Notes
Integral transforms		
Numerical evaluation of integral transforms	1999	In general, all Mathematica functions are designed to work with numerical values as well as symbolic.
Simpler definition of Hankel transform	2017	Mathematica has always used this more useful definition of `HankelTransform` that Maple has switched to in this release.
New user experience		
Warnings on misuse of e and d	2007	While Mathematica does not need to highlight the use of "e" and "d", since it uses visually different symbols for those symbols in typeset notation, it does support a wide range of automated syntax coloring to highlight user errors as they are typed. Even for this, more limited error detection, Maple does not warn as the error is typed but later when the input is evaluated.
Reactivation of time–limited licenses	1996	Mathematica does not need the new "Reactivate License" button that has been added to Maple, because it silently reactivates time–limited licenses without user intervention (unless blocked by an administrator at the user's organization).
Help on error messages	1996	Many common error messages are documented amongst more than 10,000 pages of thorough documentation available in Mathematica or online at http://reference.wolfram.com.
Learning tools for linear algebra		
Step–by–step Gaussian elimnation	1996	Wolfram|Alpha's powerful step–by–step tools are accessible in the Mathematca notebook environment.
Eigenvector plot		Available to Mathematica as `ResourceFunction["EigenvectorPlot"]`.
Least squares plot		Available to Mathematica as `ResourceFunction["LeastSquaresPlot"]`.
Math apps		
New math apps	2007	Maple's MathApps guide currently lists fewer than 400 math apps. This compares to over 12,000 in the Wolfram Demonstrations Project.
Visualization		
Image size control for 3D plots	1996	All Mathematica visualizations support custom size control throught the option `ImageSize`.
Legends on contour plots	2012	Mathematica can label any values on its `ContourPlot` legends, not just the contour values used, as Maple does. It also supports `LineLegend`, `PointLegend` and `SwatchLegend` styles, not just the line legend that Maple supports.
Adaptive mesh for plot3D	2012	Mathematica extends support for adaptive meshes to all 3D function visualizations, such as `ContourPlot3D` and `ParametricPlot2D`, not just `Plot3D`.
CVD simulation	2012	Mathematica can simulate color vision deficiency using `ImageEffect`. The Maple CVDSimulation command can be applied only to colors, but the Mathematica `ImageEffect` command can als be applied directly images, video, graphics and documents.

Maple 2020	Mathematica	Notes
Physics		
Feynman diagrams	1990	Feynman diagrams are available in Mathematica through an open source package at https://feyncalc.github.io.
Signal and image processing		
2D cross correlation	2008	Implemented in Mathematica as `ImageCorrelate`. Mathematica supports seven different distance measurements including the Dot product used in Maple.
Convolution with complex signals	1999	Mathematica's `ListConvolve` command can work with floating–point real and complex values, as Maple now can, but also with symbolic, exact and high–precision values.
HoughLine and ProbabalisticHoughLine	2010	Both of these commands are implemented in Mathematica in `ImageLines`.
2D Haar wavelet transform	2010	Mathematica's `DiscreteWaveletTransform` function can apply 16 different wavelet families, not just `HaarWavelet`. Furthermore, it can apply them to arrays and sounds, not just images. Mathematica also supprts `ContinuousWaveletTransform`.
Hilbert transform	2012	Implemented in Mathematica as `HilbertFilter`.
Root mean square (RMS)	2007	Implemented in Mathematica as `RootMeanSquare`.
Audio tools		
Read part of an audio file	2016	Implemented in Mathematica as `AudioTrim`. Mathematica can import from `AIFF`, `AU`, `FLAC`, `MPD`, `M4A`, `OggVorbis`, `SND`, `WAV` and Wave64 files while Maple supports only `WAV`.
High sample rate audio	2016	Mathematica `Audio` functionality can process audio at sample rates of 2^62 Hz and export to `WAV` at 2^31–1 Hz.
White noise generator	2016	Mathematica's `AudioGenerator` command can generate test audio using 13 different models including `"White"` noise.
Data import & export		
BSON	2018	Mathematica supports over 240 import and export formats from files, streams or URLs, including the two formats newly supported in Maple.
UBJSON	2018	
Import matrices	1999	Most of Mathematica's 240 import and export filters support multiple options to control the details of data transfer. For tabular data, Mathematica's `Import` gives controls such as `CharacterEncoding`, `"CurrencyTokens"`, `"DateStringFormat"`, `"FieldSeperators"`, `"HeaderLines"`, `"IgnoreEmptyLines"`, `"LineSeperators"` and `"NumberPoint"`, as well as the two options`"Numeric"` and `"RepeatedSeperators"` for which there are now Maple equivalents.
Data conversion to and from Python	2017	Data format conversion is handled automatically when calling to or from Python via Mathematica's `ExternalEvaluate` command or using the Wolfram Client Library for Python.

Maple 2020	Mathematica	Notes
Programming		
URL download with authentication	2016	Implemented in Mathematica as `Authentication` and with full OAuth support using `SecuredAuthenticationKey`.
Worksheets tools: RemoveSection, TableOfContents		Because Mathematica provides a full symbolic representation of notebooks that can be operated on by the Wolfram Language, it is possible to perform essentially any transformation, analysis or generation of Wolfram `Notebooks`. For example, Maple's RemoveSection command can be implemented as `NotebookPut[DeleteCases[NotebookGet[EvaluationNotebook[]],Cell[_,"Section",___], Infinity]]`.
de Bruijn sequences	2018	Implemented in Mathematica as `DeBruijnSequence`.
Interface		
Performance		
Log expansion	1991	The Maple announcement blog claims to have reduced the computation `PowerExpand[Log[2^(10^5 NextPrime[10^4])]]` to around 15 seconds. Mathematica performs this computation in around 0.1 seconds.

Developments in Maple 2020 that do not appear to be following Mathematica developments include work in group theory, Lie algebras and PDE solving.

New Features in Maple 2019

Maple 2019	Mathematica	Notes
Graph theory		
FindVertexCover	2010	Mathematica's `FindVertexCover` command supports undirected graphs, directed graphs, multigraphs and mixed graphs.
FindHamiltonianCycle	2010	Mathematica's `FindHamiltonianCycle` command supports undirected graphs, directed graphs, multigraphs and mixed graphs.
FindHamiltonianPath	2015	Mathematica's `FindHamiltonianPath` command supports undirected graphs, weighted graphs and optionally allows selection of minimum and maximum path lengths including support for arbitrary distance functions.
MaximumClique	2010	Mathematica's `FindClique` command supports undirected graphs, directed graphs, weighted graphs, multigraphs and mixed graphs. It can be directed to select cliques of specified size or intervals of sizes.
MaximumIndependentSet	2010	Mathematica's `FindIndependentVertexSet` command supports undirected graphs, directed graphs, weighted graphs, multigraphs and mixed graphs. Specific or intervals of vertex set sizes can be found.
Random graphs: BarabasiAlbertGraph	2010	Implemented in Mathematica as `BarabasiAlbertGraphDistribution`.

Maple 2019	Mathematica	Notes
Random graphs: WattsStrogatzGraph	2010	Implemented in Mathematica as `WattsStrogatzGraphDistribution`.
New special graphs	2007	Mathematica includes a database of 7852 special graphs, which includes all 11 that are newly added to Maple.
TransitiveReduction	2014	Mathematica's `TransitiveReductionGraph` supports undirected graphs, directed graphs and multigraphs.
IsStronglyRegular	2007	`"StronglyRegular"` is one of the 516 properties available through the Mathematica function `GraphData`.
IsTriangleFree	2007	`"TriangleFree"` is one of the 516 properties available through the Mathematica function `GraphData`.
Vertex display shapes	2010	As well as providing many named shapes, as Maple now does, Mathematica also supports arbitrary graphics for vertex shapes.
Mouseover tooltip on vertices	2010	All Mathematica graphics can support tooltips, including graph vertices, which has now been added to Maple. Furthermore, tooltips in Mathematica can contain graphics, tables, typeset math and formatted text, not just the plain text supported by Maple.
Computational geometry		
PointInCircle	2014	Whether a point is in a circle is just a special case of Mathematica's much more general `RegionMember` function that can test for whether a point is in much more complex regions than circles. The circle specification used by Maple is computed in Mathematica using `CircleThrough`.
PointOnSegment	2014	Whether a point lies on a specific line segment is also just a special case of testing for region membership. In Mathematica, that is also handled by `RegionMember` without having to create another function.
SegmentIntersect	2014	This is just the simplest case of Mathematica's much more general `RegionIntersection`. `RegionIntersection` finds points, lines, areas and volumes of intersection of many region primitives and derived regions.
MultiSegmentIntersect	2014	Implemented in Mathematica with the much more general `RegionIntersection` command.
3D Delaunay mesh	2014	While Mathematica does not support higher−dimension Delaunay triangulation, the important 3D case has been supported since 2014.
Statistics and data analysis		
LeastTrimmedSquares regression	2019	Available in Mathematica as `ResourceFunction["TrimmedLinearFit"]`.
Correlogram	2019	Available in Mathematica as `ResourceFunction["Correlogram"]`.
detrend	2014	Implemented in Mathematica as `EstimatedBackground`.
difference	2007	Implemeneted in Mathematica as `Differences`.

Maple 2019	Mathematica	Notes
Dataseries and Dataframe support remove, select and selectremove	2014	Mathematica's `Association` and `Dataset` supported operations to select or remove elements from their inception. Maple's Dataframe remains limited to two−dimensional tables of data while Mathematica's `Dataset` can support any dimensionality of data.
Signal processing		
FindPeakPoints	2014	Implemented in Mathematica as `FindPeaks`.
Spectrogram overlap control	2012	As well as allowing control of overlap size, Mathematica's `Spectrogram` command supports user control of offsets, padding and smoothing.
Cepstrum	2017	
FFTShift	1988	While Maple has labeled this function FFTShift, that is a specific application of a more general list and matrix rearrangement implemented in Mathematica as `RotateLeft` and `RotateRight`.
EdgeDetect	2010	The Mathematica function `EdgeDetect` allows you to find edges of different separation levels and different thresholds of detection and by sharpness or straightness. Mathematica also supports edge detection on 3D image data.
Dates and times		
Format dates	2007	Implemented in Mathematica as `DateString`.
Parse date strings	2014	Implemented in Mathematica as `DateObject`.
Language		
Increment, decrement and assignment	1988	Implemented in Mathematica as `Increment`, `Decrement`, `AddTo` and `SubtractFrom`. Mathematica also supports similar functions `PreIncrement`, `PreDecrement`, `TimesBy` and `DivideBy`.
Local scoping within expressions	1988	In Mathematica functions, procedures and expressions are the same thing, so local scoping has always been available within any kind of expression.
Operator precedures can have local variables	1988	Mathematica has never suffered from this limitation.
Using assignment, if, try and loops in expressions	1988	Mathematica has never suffered from this limitation.
Two variable for loops	1991	Mathematica's `MapIndexed` command serves this purpose but is more general in its ability to apply at any or all depths of any expressions, not just on matrices.
Remove	1991	Implemented in Mathematica as `Delete`.
Reverse supports Matrix, Vector and Array	1988	Mathematica's `Reverse` command has always supported any kind of expression.
convert/english	2014	Implemented in Mathematica as `IntegerName` and `Interpreter`.
tablereverse	2014	Implemented in Mathematica as `GroupBy`.

Maple 2019	Mathematica	Notes
Download	2016	Implemented in Mathematica as `URLDownload`. Mathematica also supports asynchronous downloads of data using `URLDownloadSubmit`.
Interface		
Supress startup screen	2007	
Short forms of matrices		Mathematica has long supported techniques for providing compact representations of all large expressions, not just matrices. `Manual` methods such as `Short` were introduced as early as 1988 and applied automatically as early as 2007.
Short forms of audio	1991	Some specialized data formats such as sampled sound have had compact representations since 1991, but the concept was made much more general in 2016.
New Units by Dimensionality palette		While Mathematica supports too many units to sensibly put them in a palette, since 1996, it has been possible to create your own palettes organized how you wish.
Customizable favorites palette	1996	You can create any custom palette in Mathematica.
SVG export	2003	Mathematica supports 226 import and export formats, including `SVG` export.
echoFile	1988	Logging of inputs and outputs can be acheived using `$Pre` and `$Post`.
11 new apps		Mathematica interactive apps are collected at the Wolfram Demonstrations Project, where there are now over 11,000 available.
Advanced math		
Improvements to integration	1988–2019	All of the new single–value integral examples given as "newly solved" in the Maple marketing are already solved by Mathematica's `Integrate` command.
Improvements to solve	1988–2019	All of the new solve examples given as "newly solved" in the Maple marketing are already solved by Mathematica's `Reduce` command.
Improvements to Fourier transforms	1988–2019	Some of the Fourier transform examples given as "newly solved" in the Maple marketing are already solved by Mathematica's `FourierTransform` command.
Improvements to PDE solvers	1988–2019	While both Maple and Mathematica have developed their symbolic PDE solvers over recent releases, Maple still lacks any FEA methods for solving numerical PDEs.
Improvement to limits	1988–2019	While both Mathematica and Maple have supported simple limits from their earliest versions, Maple still lacks support equivalent to Mathematica's `MaxLimit`, `MinLimit`, `DiscreteLimit`, `DiscreteMaxLimit` and `DiscreteMinLimit` functions.
Root finding	1988–2019	Mathematica automates root finding behind the higher–level functions `Reduce` and `NSolve`, removing the need for low–level operations like Maple's isolate. For example, the main demonstration of improvements in the Maple 2019 marketing material finds the intersection of two curves. In Maple, this example takes 40 separate inputs to explore two cases. In both cases, Mathematica's `Reduce` finds the roots in a single line of input.

Developments in Maple 2019 that do not appear to be following Mathematica developments are work in tensors, group theory and quantum physics.

New Features in Maple 2018

Maple 2018	Mathematica	Notes
Units		
Units supported by fsolve, solve, int, etc.	2012	The Mathematica `Quantity` object supported a wide range of computations from its initial release. Mathematica also supports unit–based data for its data visualization functions, which Maple still does not.
Greek letters in unit display	2012	
Computational geometry		
VoronoiDiagram	1992	Revised in 2014, this is implemented in Mathematica as `VoronoiMesh`.
ConvexHull	1992	Revised in 2014, this is implemented in Mathematica as `ConvexHullMesh`.
DelaunayTriangulation	1992	Revised in 2014, this is implemented in Mathematica as `DelaunayMesh`.
PolygonTriangulation	2014	Implemented in Mathematica within `DiscretizeRegion`.
Graph theory		
CliquePolynomial	2007	Implemented in Mathematica within `GraphData`.
DistancePolynomial	2007	Implemented in Mathematica within `GraphData`.
FindClique	2010	Implemented in Mathematica as `FindClique`.
GraphIntersection	2010	Implemented in Mathematica as `GraphIntersection`.
IndependencePolynomial	2007	Implemented in Mathematica within `GraphData`.
IsReachable	2016	Implemented in Mathematica using `ConnectedGraphComponents`.
Reachable	2016	Implemented in Mathematica using `ConnectedGraphComponents`.
Special graphs	2007	In Mathematica, `GraphData` provides information on 7,429 special graphs, including all of the eight recently added to Maple.
Advanced mathematics		
Improvements to integrate	1988–2014	Examples of improvements to int given in the "What's New in Maple 2018" pages are already solved by the Mathematica command `Integrate`.
Improvements to Sum	1988–2008	Examples of improvements to Sum given in the "What's New in Maple 2018" pages are already solved by the Mathematica command `Sum`.
Sturm supports algebraic coefficients	2007	The Mathematica equivalent, `CountRoots`, has always accepted algebraic coefficients.

Maple 2018	Mathematica	Notes
Satisfiable	2008	Implemented in Mathematica as `SatisfiableQ`.
Satisfy	2003	Implemented in Mathematica as `FindInstance`.
Generalized Polylog	1999	
Interpolation		
Interpolation returns an object	1988	The Mathematica function `Interpolation` has always returned an object that behaves like a built–in function and is integrated into the wider system. For example, `NDSolve` returns `InterpolatingFunction` answers, making them easy to use in other computations, such as integrating them. Maple's dsolve 'numeric' still returns procedures that must be sampled at specific points.
Support irregular data	2008	
Kriging	2014	Implemented in `Interpolation` as a method for `Predict`.
Dates & times		
Date object	2014	Implemented in Mathematica as `DateObject` with support for all the capabilities of the Maple date function. Mathematica date calculations support a range of national holiday schedules, including key financial markets, and supports the notion of date granularity, which Maple does not. The Mathematica `DateObject` supports Gregorian, Julian, Islamic and Jewish calendar types; Maple supports only Gregorian.
Now	2014	Implemented in Mathematica as `Now`.
DayOfWeek, DayOfYear, etc.	2014	Implemented in Mathematica as a single function `DateValue`, which gives access to both numerical and name values of fields.
HostTimeZone	2007	Implemented in Mathematica as `$TimeZone`.
IsLeapYear	2012	Implemented in Mathematica as `LeapYearQ`.
DateDifference	2007	Implemented in Mathematica as `DateDifference`.
Thermophysical data & scientific constants		
Thermophysical data and scientific constants	2007	The addition of data on 2,000 chemicals still leaves Maple far behind Mathematica's `ChemicalData` database, which currently provides up to 100 properties for over 44,000 chemicals. Knowledge of chemicals is just one of many databases of real–world knowledge built into Mathematica. For example, Maple provides none of the data on astronomical bodies, human physiology, subatomic particles, weather, proteins, geo–elevation or the human genome that Mathematica does.
Visualization		
Rotatable text	2007	Any visual content can be displayed rotated in Mathematica, including typeset math, images and graphics—not just text.
ParetoChart	2002	Implemented as `ParetoPlot`.

Maple 2018	Mathematica	Notes
Borderless arrow	2007	Mathematica supports arbitrary shapes for `Arrowheads`, including full border control, but does not support arrow–stem borders.
Image tools	1988	Surprisingly, Maple has lacked user tools for describing diagrams up to now, and the new Line, Poly, circle and text primitives fall far short of the equivalent Mathematica tools. Maple's tools support only 2D images, and require a prior decision about the output image resolution. Mathematica supports many more graphics primitives (`BSplineCurve`, `Ellipsoid`, `Sphere`, etc.), rasterizes them in real time according to the viewing size (unless you choose to fix the resolution) and can be combined with all of the built–in visualizations.
Connectivity		
Execute Python	2017	Implemented as `ExternalEvaluate`.
Link to TensorFlow	2014	Rather than provide only a link to an external library, Mathematica contains a fully automated machine learning framework that integrates deeply with other parts of the system and is backed transparently by MXNet for low–level computations.
Programming		
Code editor improvements		Maple uses a different editor for code inside interactive elements than it does for general input. Error highlighting, function autocompletion and filename completion are not available in the rest of the Maple Worksheet. In Mathematica, they are supported in general input.
Until	1988	In Mathematica, `While[body;test]` is equivalent to an `Until` statement.
Inline assignments	1988	Any expression can be evaluated inside any other expression in Mathematica, including assignments.
Random variable names	1988	This need is addressed in Mathematica as `Unique`.
SameStructure	1988	Implemented in Mathematica as `SameQ`.
Encrypted procedures	1988	Implemented in Mathematica as `ReadProtected`.
Uneditable content	1996	The Wolfram Notebook has long supported the notion of uneditable content, but this can be controlled at the character level, not just at the whole–document level. It also supports control over whether content is selectable or copyable, which Maple does not.

Developments in Maple 2018 that do not appear to be following Mathematica developments are new interface layouts, practice sheet generation, extensions to quantum physics, group theory and differential equation solving functions

New Features in Maple 2017

Maple 2017	Mathematica	Notes
Visualization		
Dynamic plot annotations	2007	Maple's annotation options are a limited version of Mathematica's Tooltip command. Tooltip is not limited to use within graphs, and can also be applied within tables, to text or within typeset math; it can also contain any kind of content, not just text. Tooltip is just one kind of annotation that Mathematica can apply to elements in graphics. Label and `Callout` allow annotations that appear in fixed positions or that can be automatically positioned to avoid overlap. Mathematica can also be set to execute arbitrary code using `EventHandler` on events such as mouse down, up, hover, drag and key events.
Contour plot support for tooltip	2007	As well as automatically adding tooltips in `ContourPlot`, Mathematica does the same in `GraphPlot`, `PieChart` and other visualizations that Maple, so far, does not. Mathematica also makes automatic use of Tooltip to disambiguate similar traditional math notations. Maple does not.
Periodogram	2012	As well as `Periodogram`, Mathematica supports `Spectrogram` and `Cepstrogram` visualizations of signals and `ImagePeriodogram` visualizations from images. Mathematica can also compute 35 different properties of audio over time or frequency space using `AudioMeasurements` and `AudioLocalMeasurements`.
Violin plots	2010	Mathematica's `DistributionChart` supports eight different types of distribution visualization, of which violin plots are just one. Mathematica automatically annotates its violin plot with additional tooltip information. Maple does not.
Weibull plot	2010	Weibull plots are a special case of a `QuantilePlot` with a log–log scaling function.
Bar charts support color schemes	2008	Mathematica's `BarChart` also supports a collection of predefined and user–defined bar shapes.
Bar charts support individual bar colors	2008	Mathematica's `BarChart` also supports individual bar shapes.
Color palette display	2008	Mathematica's `ColorDataFunction` automatically displays as color swatches.
Chroma, Hue, Luma, etc.	2008	Mathematica natively supports six color spaces, allowing it to convert to or directly represent color in `LCHColor`.
Discontinuity option in DensityPlot	2007	Mathematica automatically detects discontinuities without needing special instruction.
Statistics		
Remove columns from DataFrame	2014	Maple's DataFrame design is limited to 2D tables of rows and columns. This addition continues to embed that assumption. Mathematica's `Dataset`, which appeared before Maple's DataFrame, allows arbitrarily deep data structures, including the simple case of rows and columns.
Sort supports DataFrame	2014	When Mathematica added its generalized database structure `Dataset`, every function could be applied to it.

Maple 2017	Mathematica	Notes
Geo computation		
Choropleths	2014	Maple's ChoroplethMap command is a very limited implementation of Mathematica's `GeoRegionValuePlot`. Maple can only color country regions, while Mathematica knows the geometry of other administrative divisions such as states, counties and continents, historical country boundaries and user–defined regions. Mathematica supports a choice of map textures including street maps, terrain, a choice of satellite imagery and user–defined textures, while Maple maps are just blank colors. Mathematica supports over 500 map projections, while Maple supports only 16. Choropleth is just one type of geo visualization. Maple lacks other types such as `GeoHistogram`, `GeoSmoothHistogram` and `GeoBubbleChart`. Mathematica also supports geo visualization for other planets and moons, while Maple supports only Earth.
Geographic data	2007	Maple's new geographic data is a limited implementation of Mathematica's `"City"` entity type. The Mathematica entity system provides up to 97 properties on `"City"` entities, but also provides more than 60 other entity types for which geographic information is known, such as mountains, weather stations, oil fields and volcanoes. Mathematica can also convert street addresses into geo positions.
Great circle paths	2014	While Maple can place lines between geo points, it cannot place lines using direction and distance directives or correctly draw geo disks and geo circles as Mathematica can.
Graphs		
Style control for graphs	2007	As well as being able to control the colors of edges and vertices, as Maple added in this release, Mathematica allows complete control of the shape of edges and vertices and provides a collection of predefined style collections.
New special graphs	2007	Mathematica's `GraphData` command provides access to over 450 properties of nearly 7,000 special graphs. All six of the new graphs added to Maple were already in this database.
DrawAutomorphism		While Mathematica does not provide this visualization, the underlying data is generated with the Mathematica command `GraphAutomorphismGroup`.
GraphDiameter	2010	Implemented in Mathematica as `GraphDiameter`.
Eccentricity	2010	Implemented in Mathematica as `VertexEccentricity`.
Graph6 import	2007	
Math		
SearchSmallGroups	2014	Mathematica uses a common function, `EntityList`, to search any entity type (cities, chemicals, animals, etc.) that matches a criterion. This includes searches of `"FiniteGroup"` entities.
CharacterTable	2014	CharacterTable is a property of the `"FiniteGroup"` `Entity` type.
Sums of binomial functions	1991	Most of the examples given as improved Maple output already produced compact answers in Mathematica in terms of `Binomial` functions.
Integration improvements		All the "What's New in Maple 2017" integration examples were already solvable in Mathematica.
ChineseRemainder	2007	
IthFermat		This Maple function just calculates $2^{2^n} + 1$; however, Maple returns "object too big" for IthFermat(30), while Mathematica correctly calculates all 323,217,816 digits.

Maple 2017	Mathematica	Notes
SimplestRational	1988	Implemented in Mathematica as `Rationalize`.
coulditbe	2003	Implemented in Mathematica as `Reduce` and `Exists`.
Parity	1988	Implemented in Mathematica as `Xor`.
content	1988	Similar functionality is available in Mathematica using the command `FactorTermsList`.
LambertW simplifications	1996	
Appell functions	1999	`AppellF1` is supported in Mathematica.
New PDE solving algorithms		Some of the newly solved PDE examples given in the Maple promotional literature are already solved in Mathematica.
Improvements to Limit		`Limit` finding is longstanding functionality in both Maple and Mathematica. Mathematica has also added significant improvements to `Limit` in 2017.
User interface		
Automatically insert multiplication symbols	2007	Mathematica allows you to customize the choice of multiplication symbol that gets inserted.
Visibility control of code edit regions	1996	`Notebooks` have supported an option to hide content since they were first incorporated into the Wolfram Language.
Password protection	1991	Mathematica applies content encryption to code rather than notebook contents. Like this new Maple capability, the Mathematica command `Encode` allows you to read–protect source code, but it also allows you to limit the execution of code to a specific license or to a specific computer.
Track Combo Box or List Box by index	2007	Mathematica's `PopupMenu` and `ListPicker` can both be indexed by arbitrary labels, not just by index or value.
Time series operations from context menu	2012	Mathematica's Suggestions Bar has always supported `TimeSeries` operations.
30 new math apps	2007	In 2007, Wolfram launched the Wolfram Demonstrations Project as a home for all kinds of interactive demonstrations and math apps. In the same amount of time that Maple added 30 math apps, http://demonstrations.wolfram.com grew by over 700 demonstrations to total more than 11,200, thanks, in part, to the easy authoring made possible by Mathematica's `Manipulate` command.
Connectivity		
URL Package	2014	In addition to being able to construct arbitrary URL requests, Mathematica also supports asynchronous URL interaction and OAuth authentication.
SMT–LIB, YAML, MP4 import and export		While Mathematica does not yet support these formats, it still supports more than twice as many `Import` and `Export` formats as Maple does.

New features of Maple that did not appear to be correlated to Mathematica features include general relativity functions and Swift code generation, entropy charts, Venn diagrams and various user interface improvements.

New Features in Maple 2016

Maple 2016	Mathematica	Notes
Data science & statistics		
DataSeries	2014	Mathematica's `Association` data structure provides not only the convenience of a key–value data structure construct but is also an efficient hash table structure for large data sets.
DataFrame	2014	Maple's DataFrame structure is similar to Mathematica's `Dataset` structure except it is limited to simple 2D tables. In contrast, Mathematica also supports arbitrarily deep, irregularly structured heterogeneous data.
Multiset	2014	Maple's Multiset is only one special case of a more general reduce step in map–reduce type problems. Mathematica supports this with `Merge`[data, `Total`] but is capable of doing arbitrary merges of map data, for example, by tracking the largest key value using `Merge`[data, Max].
Principal component analysis	2010	As well as `PrincipalComponents`, Mathematica supports `DimensionReduction` and a range of machine–learning techniques using the functions `Predict` and `Classify`.
Scree plot	2010	This is implemented in Mathematica more generally as `ParetoPlot` and becomes a scree plot when applied to `Eigenvalues`.
Linear regression summarize	2008	`Over` 60 properties of a Mathematica `LinearModelFit` or `NonlinearModelFit` are available including `Parameter`Table.
Hypothesis testing summarize	2010	Mathematica hypothesis tests include the property TestDataTable for summarizing test results.
Explore In 2007, Mathematica introduced the concept of automatically–generated, interactive computional interfaces. Since then, Maple has been edging towards the functionality that was available in Mathematica's `Manipulate` function at launch. There are still many capabilities Maple's Explore command lacks, such as automatic cloud deployment, asynchronous evaluation, gamepad inputs, user–created control elements, automatic performance adjustment, and much more.		
Text area controllers for evaluating at custom values of a parameter	2007	`Expression` input fields in Mathematica support both inert and live evaluation content. Mathematica also supports a large collection of `Interpreter` types which can interpret and enforce input other than generic text or math, such as city names, country names, email addresses, chemical names, or more than a hundred other types.
Simplified calling sequence	2007	This change mirrored Mathematica's syntax for describing parameters directly.
Name resolution	1988	While `Manipulate` was added to Mathematica in 2007, the ability to create functions that consider their arguments before evaluating them has been a core part of the Wolfram Language since its inception using the attributes `HoldAll`, `HoldFirst`, and `HoldRest`.
Controller customization	2007	Mathematica allows customization of all of its controller types including size, step size, initial values, tooltips, etc.
Controller placement	2007	
Color customization	2007	Mathematica provides a general `Panel` construct that can be used for any content, not just `Manipulate`. It has always supported arbitrary color choices.

Maple 2016	Mathematica	Notes
Borders	2007	Mathematica provides a general `Framed` construct that can be applied to any content, not just `Manipulate`. Where Maple allows border settings of only true or false, Mathematica supports control of `Thickness`, color, `Dashing`, and corner `RoundingRadius`.
Alignment and width	2007	Mathematica allows widths and heights to be absolute or proportional to the container (such as page width or column width) and a range of alignment options.
Record	2007	Storing evaluation results to a variable in Mathematica's `Manipulate` command is the same as any other evaluation without needing a special option. In addition to storing in a variable, changes can be written to files, and there is a bookmark feature built into the `Manipulate` user interface that lets users save interesting combinations of parameters. These can also be predefined by the developer.
Graph theory		
DrawGraph: round vertices	2007	While Maple added support for round or square vertices in graph drawing, Mathematica allows any graphic or image to be used or can be programmatically generated from the vertex name or its coordinates.
MaximumMatching		This functionality is provided by the Mathematica commands `FindMaximumFlow` and `FindMinimumCostFlow`. Maple requires the data to be an undirected, unweighted, bipartite graph. This is the simplest possible case supported by the Mathematica commands, which can optimize flows over multiple weighted steps across directed, undirected, and mixed graphs.
CliqueCover, CliqueCoverNumber		Similar functionality can be achieved using Mathematica's `FindCliques` command.
GlobalClustering–Coefficient	2012	
IntervalGraph	2005	
IsArborescence		This can be achieved using `ConnectedGraphQ` and `FindSpanningTree` in Mathematica.
LocalClustering–Coefficient	2012	Implemented in Mathematica as `LocalClusteringCoefficient`.
ReverseGraph	2010	Implemented in Mathematica as `ReverseGraph`.
TransitiveClosure	2005	
Logic		
Logic: Satisfiable	2008	This is implemented in Mathematica as `SatisfiableQ`.
Logic: Satisfy	2008	This is implemented in Mathematica as `SatisfiabilityInstances` with additional functionality as `SatisfiabilityCount`.
Logic: TruthTable	2008	This is implemented in Mathematica as `BooleanTable`.
Mathematical functions		
Conjugate of RootOf objects	1996	Support for `Conjugate` was included with the introduction of Root objects in Mathematica.

Maple 2016	Mathematica	Notes
Products of RootOf objects	1996	Support for `Product` was included with the introduction of Root objects in Mathematica.
Series of Airy functions	1988	Support for `Series` was included with the introduction of Airy functions in Mathematica.
Series of Gamma function	1988	Support for `Series` was included with the introduction of `Gamma` in Mathematica.
Series of Hypergeometric functions	1996	Support for `Series` was included with the introduction of hypergeometric functions in Mathematica.
Limits of oscillatory functions	1988	The examples given in Maplesoft's marketing of improvements were all already solvable in Mathematica.
Integrals of rational functions	1988	The examples given in Maplesoft's marketing of improvements were all already solvable in Mathematica.
Sums involving Jacobi theta	1988	This is implemented in Mathematica as `EllipticTheta`.
Series of abs and signum	2004	
Piecewise sums	2004	
Sums diverging to ± ∞		The examples given in Maplesoft's marketing of improvements were all already solvable in Mathematica.
Doubly infinite sums		The examples given in Maplesoft's marketing of improvement were already solvable in Mathematica.
Symbolic PDEs		Some of the new solutions provided by Maple for symbolic PDEs were already possible in Mathematica. For numeric PDE solving, Maple does not have an equivalent of the powerful FEA–based solver built into Mathematica.
Mathematical identities: Bessel, KelvinBei...	2015	Since 1998, Wolfram has maintained the website functions.wolfram.com, which contains over 107,000 formulas and identities ready to compute with Mathematica. Since 2015, Mathematica has included these as a built–in, searchable data source via the command `MathematicalFunctionData`.
Document interface From its inception in 1989, the Wolfram notebook interface has set the agenda for Maple's interface. In 1996, it was re–engineered so that documents could be entirely described in a Wolfram Language representation. The unification between document and language made a range of programmatic generation, analysis, and control of documents possible that Maple is still unable to match today.		
Tables: programmatic creation and control	1996	As well as programmatic control of table cell colors, sizes, and alignment, Mathematica provides support for styled borders and cells which span rows or columns.
Programmatically adjust math containers	1996	
Non–executable math content	1996	Mathematica supports this feature on a cell, named style, stylesheet, or document level using the option `Evaluatable`.
Component font color	2007	Most interactive components in Mathematica support not just font color but also font family, weight, italics, background color, etc.

Maple 2016	Mathematica	Notes
Component transparency and fill color	2007	
Replaceable content	1996	
Arbitrary document zoom level	1996	
Global zoom setting	1996	Mathematica allows zoom setting at any level, not just global and document. For example, a low resolution bitmap logo in a notebook's docked cell might use `Magnification → 1` to prevent it from following a user's choice of document–level zoom and appearing pixelated.
Full screen mode on Mac	2012	Mathematica has always supported Mac OS X with fully native implementations.
Optional section openers	1996	
Visualization		
Coloring with functions of coordinate values	1991	The Mathematica option `ColorFunction` provides parametric color control to many different kinds of plots. In addition, Mathematica's use of symbolic wrappers for data points makes support for Tooltip, `Button` actions, Label, and more controllable at an individual–point level.
HeatMap	2004	This is implemented in Mathematica as `MatrixPlot`, `ArrayPlot`, and `ListDensityPlot` depending on interpolation choices.
GridPlot		While no direct equivalent is available in Mathematica, this graphic can be easily created with the more general `GraphicsArray` command.
Color schemes	2007	Mathematica provides over 170 pre–defined color schemes. In addition, the `PlotTheme` option controls a whole collection of aesthetic choices at once from a collection of designs created by Wolfram graphic designers.
Miscellaneous		
Math Apps and applications		In 2007, Wolfram launched the Wolfram Demonstrations Project as a home for all kinds of interactive demonstrations and math apps. In this release, Maple added approximately 22 new interactive Math Apps and applications. In the same amount of time, demonstrations.wolfram.com grew by over 500 demonstrations to total more than 10,500, thanks, in part, to the easy authoring made possible by Mathematica's `Manipulate` command.
NumberTheory package		Maple 2016 deprecated around 50 number theory commands and redesigned them to use Mathematica–style naming (full words with camel–case capitalization). For example, Maple's cfrac command has been renamed to `ContinuedFraction`, the same as in Mathematica. In general, recent additions to Maple use naming conventions similar to Mathematica, but most older Maple commands are still accessed by inconsistently abbreviated and capitalized legacy names.
Thermophysics data	2014	Mathematica provides access to thousands of data sets and thermophysics data is accessed via the command `ThermodynamicData`. It can also be accessed using free–form input in Mathematica which is interpreted by Wolfram|Alpha. For example "enthalpy water 298K 1 atm" returns the result 104293 J/kg.

Maple 2016	Mathematica	Notes
Student multivariate calculus		Mathematica does not attempt to provide student versions of its functions and so does not face the question of how many of its functions need two versions. Some of the functionality provided by student packages is available via the Wolfram|Alpha integration to give rich, step–by–step solutions, and using the command `$Pre=Assuming[_∈Reals,Simplify[#]]&` tells Mathematica to treat all user variables as reals.
Workbook file format		While Mathematica does not have the user interface for browsing within archives, it has supported the ability to read or write files within standard .zip or .gz archive formats since 2007. This allows you to package multiple files together and access each component separately, similar to this new Maple feature.
Saved variable values	1988	Mathematica has had the ability to save variables or other state information since its inception and extended it in 1996 with a very fast binary format. See `Save` and `DumpSave`. In 2015, Mathematica introduced the ability to automatically save changes to variables both locally and to the cloud. `CloudSymbol` can even be used to share between multiple users during simultaneous or asynchronous sessions.
Parallel computation: ThreadSafeLock		While Maplesoft promotes thread–based programming as a feature, it remains hampered by the small number of commands which are actually thread safe. `Thread`SafeLock is another tool to allow users to try and manage this situation. Mathematica's approach to parallel computation, of launching multiple, full–compute kernels, does not suffer from thread safety issues, making it much simpler to use. See "Comparison of Parallel Programming"
Iterator package		Iterating over discrete structures is supported in the Wolfram Language.
Forgetting remember tables	1988	Because Mathematica's idiom for remember tables generates objects that can be manipulated by the Wolfram Language, Mathematica is able to clear individual or classes of remembered values, not just the whole table.
Word lists	2007	Maple added a dictionary of English words. Mathematica provides dictionaries and word searches in many languages; single–word translation between languages; and, for English, more than 30 properties of each word such as synonyms, antonyms, and parts of speech. See `WordData`, `DictionaryLookup`, and `WordTranslation`.

New features of Maple 2016 that were not, at least in part, following Mathematica capabilities focus on general relativity functions and Julia code generation.

For more comparison information, see:
http://www.wolfram.com/mathematica/compare-mathematica/compare-mathematica-and-maple.html
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