Interface

Inserting New Document Blocks in

Document Mode

Step-by-Step Evaluation

Easy to Integrate Math into Your Text

Display of Scientific Notation

Code Edit Regions

Auto Save Options

Control over Warning Messages for Common

Mistakes Involving "e" and "d"

Notifications from the MapleCloud

Improved Usability of Search Box

Inserting New Document Blocks in Document Mode

In Maple 2021, inserting white space is now easier. In previous releases of Maple, you could only insert new document blocks above the in-focus block using the menu item Insert > Paragraph > Before Cursor or the key combination Ctrl + Shift + K (Command + Shift + K, Mac).

In Maple 2021, if you move the insertion point to the left of a document block (Home position), the cursor is now bold, as illustrated here: k = 3.

Now, if you press **Enter**, the in-focus prompt is moved down and a new document block created.

You can control this feature in the **Interface** tab of the **Options** dialog, using the **Home** + **Enter inserts new line 2-D math** check box.

Step-by-Step Evaluation

In Document Mode, pressing **Enter** in a document block (math input) now moves the cursor to the next math input (in previous releases, the cursor may have moved to the start of the next line of text).

This means you can now quickly update parameters and see the downstream effects with just the **Enter** key.

Easy to Integrate Math into Your Text

In Maple, math can be executable or nonexecutable. Often when integrating math into a paragraph of text, you want the math to be nonexecutable. Now in Maple 2021, when using the **F5** shortcut key to switch to math, you get nonexecutable math by default.

	Nonexecutable math mode	Math mode
This is text.	fdy	$\int x^3 + \tan(x) \mathrm{d}x$

In particular, **F5** is now a toggle button between three states: text, nonexecutable math, and executable math.

In addition, the context bar above your document now has three buttons that reflect these three states. These function as an indicator of your current entry mode, and can be used to switch modes. Click on the **Text**, **Nonexecutable Math**, or **Math** button to switch to that entry mode.

Display of Scientific Notation

When a number is displayed in scientific notation, it is now displayed with a visible x, rather than implicit multiplication.

The default setting can be changed using the **interface(scientificx)** setting. See <u>interface</u>.

Code Edit Regions

Pressing **Shift** + **Enter** now inserts a new line.

Pressing **Enter** now executes the contents of the Code Edit region.

The output of Code Edit regions now contains a label reference. You can now also insert label references into Code Edit regions.

$$x - \frac{1}{6}x^3 + O(x^5) \tag{5.1}$$

$$x - \frac{1}{6}x^3$$
 (5.2)

Auto Save Options

A new option is available if you want to keep auto-saved files. The **Keep files** option is found in the **General** tab of the **Options** Dialog. If **Auto save** is selected and this option is not selected (the default), a backup is saved only until you recover your saved worksheets. If this option is selected, the backup remains even after you use **File** > **Restore Backup**.

Control over Warning Messages for Common Mistakes Involving "e" and "d"

When you type simply "e", in some cases Maple thinks perhaps your intended meaning is the exponential constant, and a warning message is displayed. This is designed to help new users by showing them the right way to enter the exponential constant in Maple: use the symbol e or use the **exp** function. A similar situation can occur with typing simply "d"

instead of using the symbol d or a palette expression for $\frac{d}{dx}\,.$

The warning messages, as well as the explanatory pages linked from those messages (for e and for d), provide concrete examples to help you enter expressions that are parsed properly by Maple, making problem solving easier. However, based on user feedback, some users want an option to suppress these messages. It is now possible to suppress these warning messages using Typesetting:-Settings(parserwarnings=false).

Notifications from the MapleCloud

Maple now has a notification system that will be used to send you messages relevant to your use of Maple, such as the availability of a new release. If you are signed in to your Maplesoft account, you may also receive messages related to your activities, such as a message when an update is available for a package you installed from the MapleCloud or a notice that someone has commented on your MaplePrimes post. These types of messages may not be available when Maple 2021 is first release, but will be added over time.

Beside the MapleCloud icon on the right side of the toolbar is a new **Bell** icon (a). A blue dot on this icon indicates unread messages in the Message Center. Click the Bell icon to view your messages.

Improved Usability of Search Box

One way to access Maple help is by using the <u>search box</u> on the Worksheet toolbar. Now searching for terms is easier than ever. You can now use copy-paste through your right-click (**Command**-click, Mac) menu to search for a help page or topic.



Copy the word or phrase, right-click (**Command**-click, Mac) on the search box, and select **Paste**.