KVS, ZIET BHUBANESWAR

A QUICK GUIDE TO TARSIA FORMULATOR

Tarsia formulator is free to download program to create all kinds of shape puzzles quickly & easily.

A QUICK GUIDE TO TARSIA

WHAT IS IT?

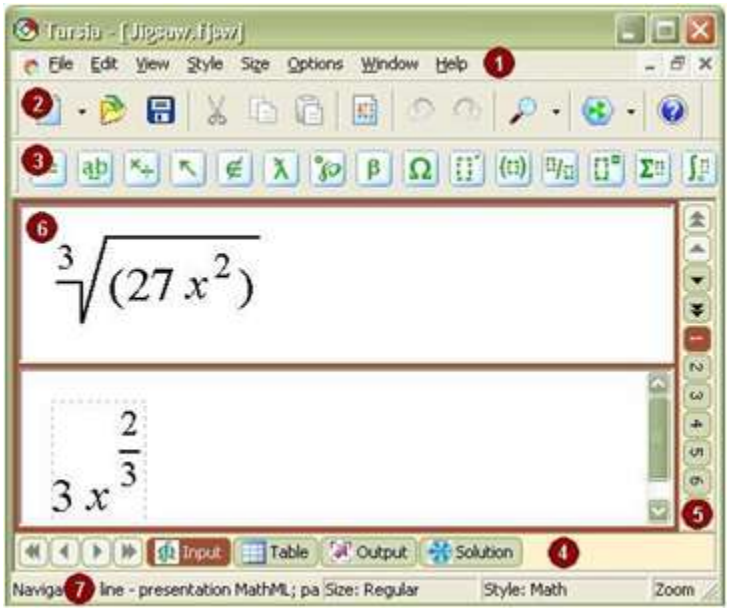
Tarsia formulator is free to download program to create all kinds of shape puzzles quickly & easily.

Download the program from: http://www.mmlsoft.com/index.php/products/tarsia

Creating learning activities with Formulator Tarsia

Formulator Tarsia contains the following interface elements:

(1) System menu;
(2) 'Formulator Expression' toolbar (appears only on the 'Input' view of activities);
(3) 'Standard' toolbar;
(4) Bottom navigation bar;
(5) Right hand navigation bar (appears in the input view and in other views when there are several options);
(6) Document area;
(7) Status bar.



Bottom navigation bar

This navigation bar is located under the 'Document area' and allows you to switch between different views of an activity. The bar changes according to the type of activity selected. For instance, hexagonal jigsaws and dominoes have 4 types of views: 'Input', 'Table', 'Output', Solution. The rest of activities have the only 'Input' and 'Output' views.

Right hand navigation bar

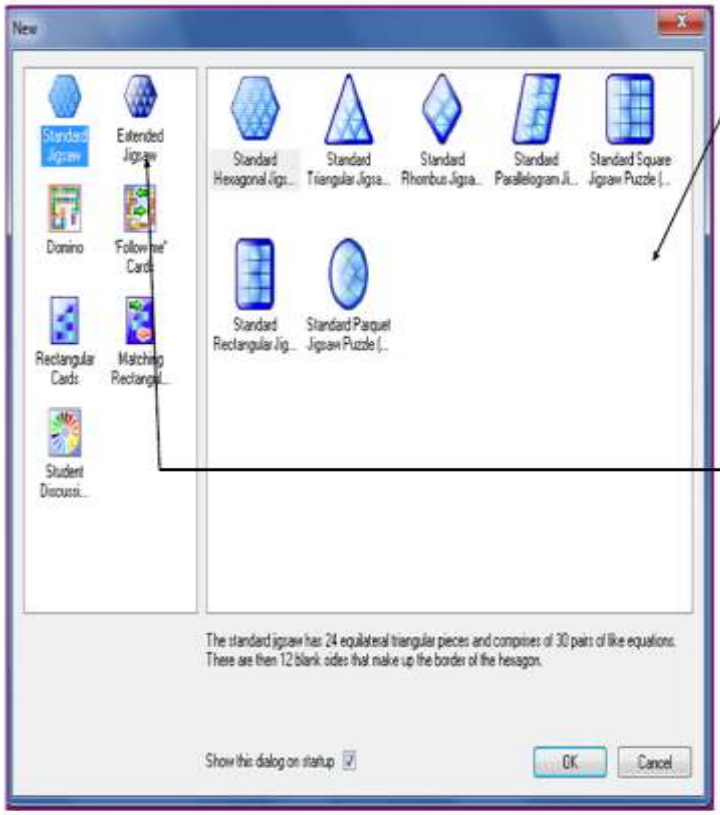
This navigation bar is located to the right of 'Document area' and allows you to quickly jump to any of your expressions in order to edit them. The number of the expression you are currently working on is darkened. There are two types of navigation arrows: single arrows to move the bar one place forward or back, double arrows to move the bar by ten increments forward of back.

Document area

The document area is used for both entering the expressions in the editing slots and for viewing. Editing slots are used when building mathematical expressions for activities cards (for the 'Input' view). The viewing area is used for the other reasons (e.g. browsing, print preview etc.) ('Table', 'Output', 'Solution' views). When typing the mathematical expression the document area contains a slot or series of slots for expressions. To build mathematical expressions, please use the toolbar, and insert the chosen expression slot in the cursor position, type the text, numbers or operators. For 'Formulator Expression toolbar' the keyboard shortcuts are also available.

Getting Started:

Open the program. The opening screen give you these options from which to choose-



Standard Jigsaw: these are seven different shaped jigsaw, all with blank edges. When you click on one of these shapes , it tell you how many pieces, the jigsaw comprises, how many pairs of words or phrases you will need and how many blank sides the puzzle will have

Extended Jigsaw: similar to the standard jigsaw, but they also specify the number of "unpaired" words or phrases that will make up the edges or the puzzle thus making it more difficult.

Domino: click the icon to find out how many pairs of words or phrases are needed for each game. Each game has 'start' and 'finish' square, so this setting is more suitable for making follow me cards.

Follow me Cards: these cards, when the puzzle is complete, will form a continuous loop and so this setting is more useful for making Domino games

Rectangular Cards: this setting makes cards with single words or phrases, and involves no matching

Matching Rectangular Cards: as for the rectangular cards above, but it randomizes the cards for matching in pairs.

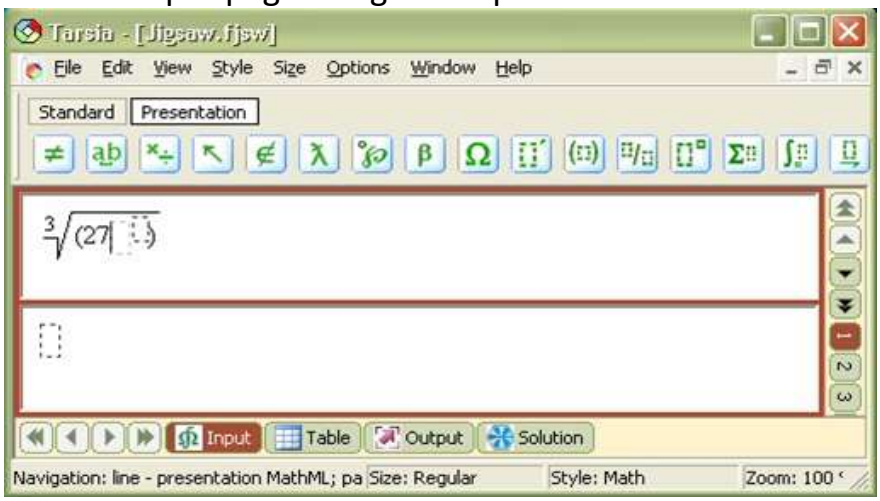
Student Discussion Circle: this setting makes segments, each of which has a question on the top and answer on the bottom and which all join up to make a big circle.

Inputting Mathematical Expressions

The software provides an easy-to-use mathematical expressions editing tool to create expressions that appear on the cards for activities. This tool is based on Formulator ActiveX Control that allows you to create mathematical expressions through simple point-and-click techniques. It has an intuitive and visually oriented interface similar to the most text editors for Windows. Formulator Tarsia provides a large number of templates giving the possibility of constructing a wide range of mathematical expressions.

In order to input the expressions:

1. Select Input page using the 'Input' button of the bottom navigation bar.



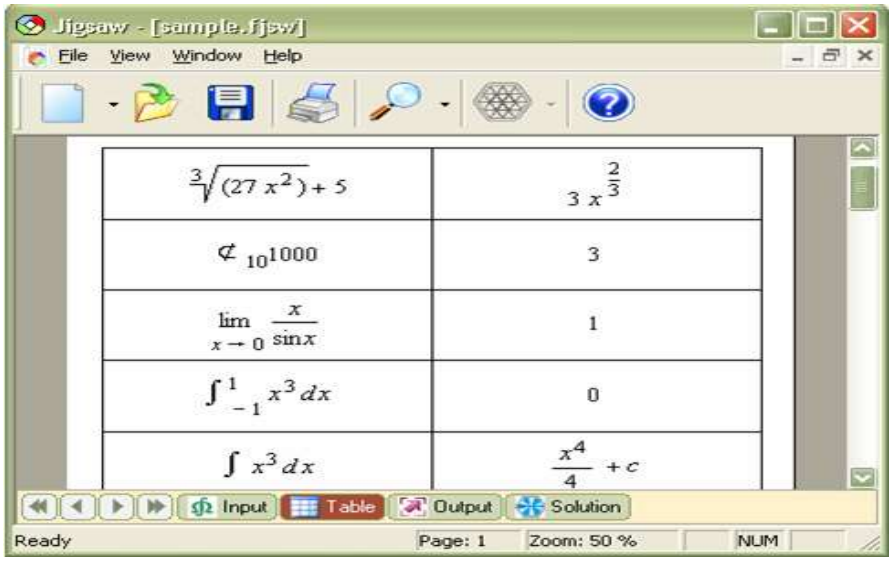
2. Type the expressions using the keyboard and selecting the mathematical constructs from the toolbars.

When working with expressions you can use variety of Tarsia features: management of the expressions' styles and sizes, zoom in to or zoom out of the expressions, nested view, export expressions in MathML format or into image. You can use standard elements of user interface like menus, toolbars, and shortcuts.

Checking using the table of expressions

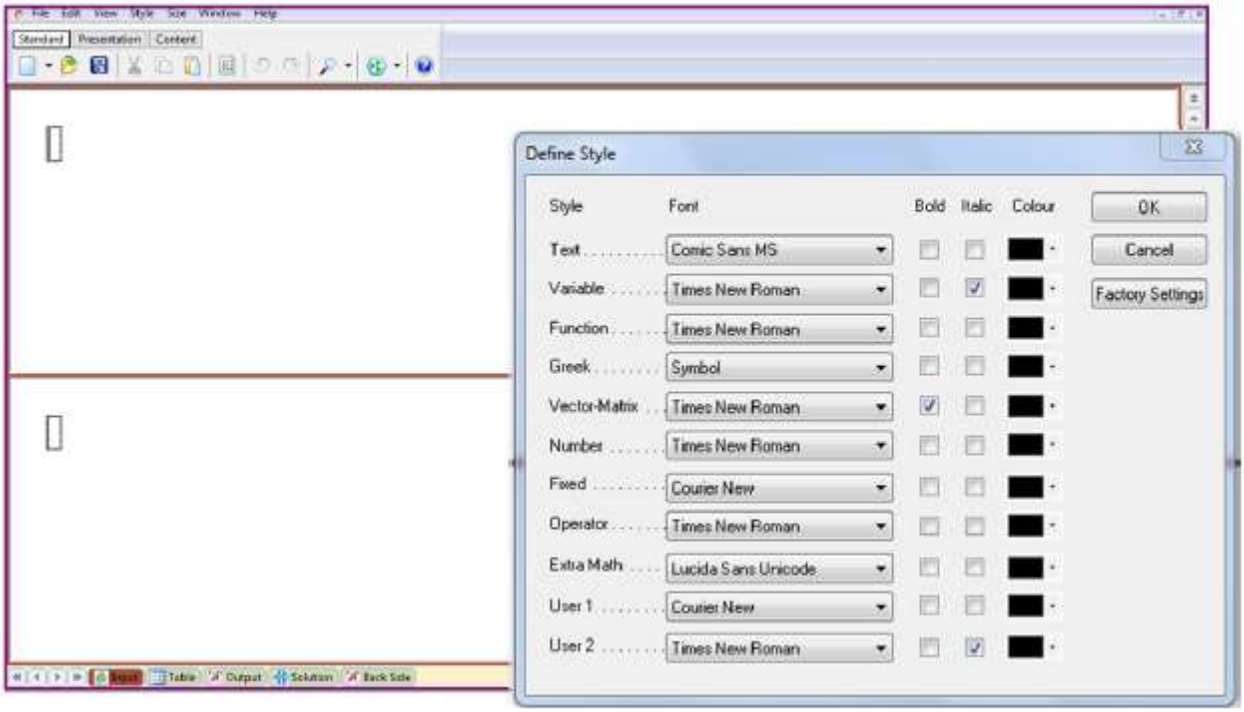
When you create a hexagonal jigsaw or domino activity it is useful to check the expressions by viewing the pairs of equivalent expressions in a table. The 'Table' page makes it possible to browse and print the expressions presented in matching pairs in table format.

To open the 'Table' view page select the button 'Table' at the bottom navigation bar.



Making non mathematical Puzzle:

Once you have selected the type of puzzle you would like to make, you will see this screen-



Change the style to text and select a font as

Style > Select > “Text”

Then: Style > Define and for text , select the font that you wish to use.

<u>Inputting the pairs of words or phrases:</u> type one of the pars in each box. You can use ALT + number codes to type the accents.

You can also insert a picture in one of the boxes. To do this, click on ‘Edit’ & insert image. The image can be .bmp,.jpg, .gif, or .png format.

Don’t worry about the size of the picture /image you are inserting, as Tarsia will resize it.

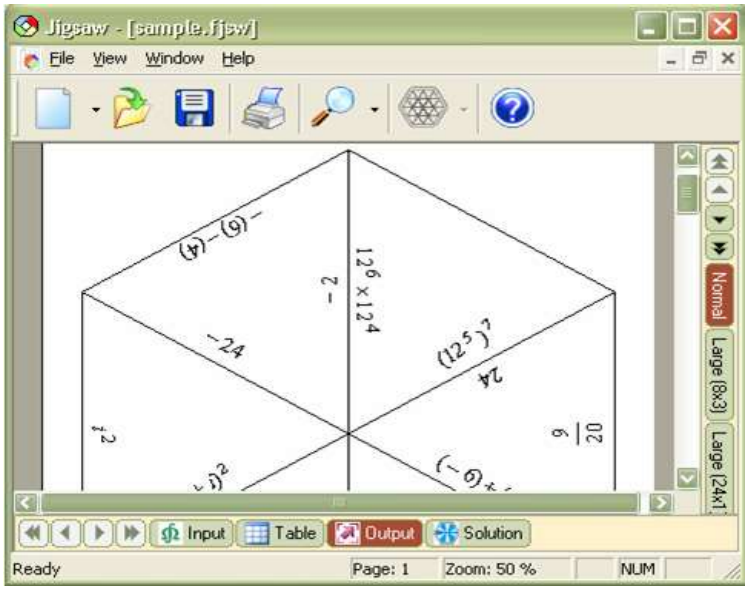
To go to the next pair of words or phrases, click on the number of the next pairs in the right hand side. Of the screen (circled). Continue until you have typed in all your pairs of words or phrase.

Viewing the Output

Formulator Tarsia allows you to preview an activity as it will appear when printed ready for cutting out. 'Output' view allows you to display the current activity, and to use ‘Zoom’ to change the size of the view. For hexagonal jigsaws, the level of magnification of the print out is controlled by the right-hand navigation bar using the ‘Normal size’, ‘Large size(8x3)’ and ‘Large size(24x1). The ‘Large size’ buttons allow you to produce a large puzzle which might be helpful to learners with visual impairments. The 'Simplified version' of the hexagonal activity output gives only the central six triangles of the jigsaw. Teachers and trainers can offer the simplified version of a jigsaw to learners who are finding the topic difficult and might benefit from a more limited choice of options. However, once learners have created the jigsaw, the teacher or trainer could then release the remaining triangles to complete the 24-triangle jigsaw.

The right hand navigation bar appears only in jigsaw activities, the other types of activity have only the Normal size set by default. The Normal output can always be enlarged if required on a photocopier.

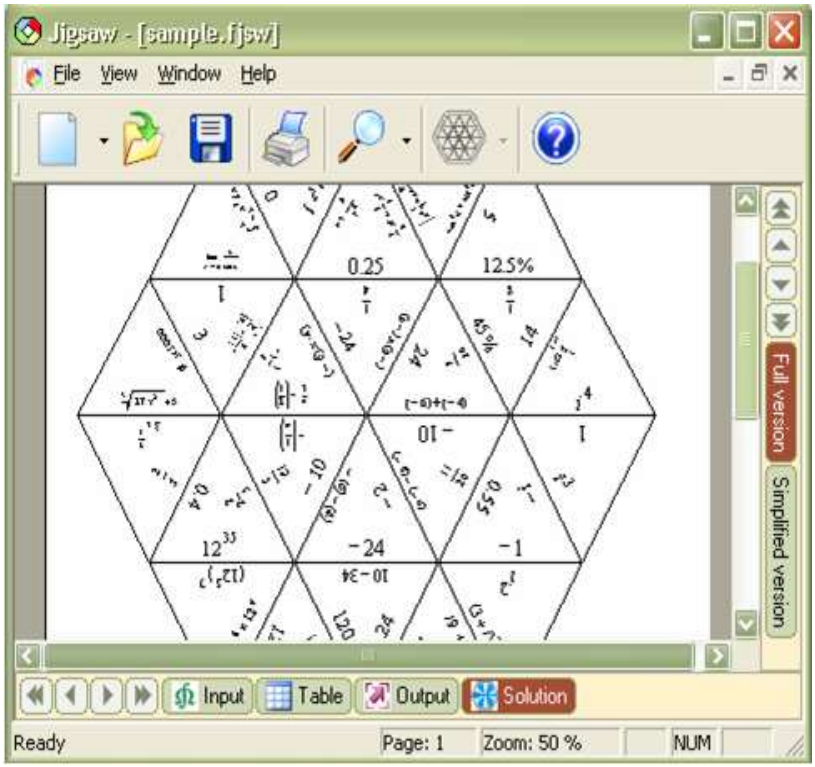
To switch to output preview select the button 'Output' in the navigation bar at the bottom of the window.



Viewing the Solution

This view appears only in jigsaw and domino activities. These are not intended for use by learners but, while creating the activity you can see the solution of the activity presented on

the 'Solution' view. This view makes it possible for you to display, browse and print out the current activity solution. The level of magnification of the view is controlled by the right hand navigation bar with buttons: 'Full version', shows the 24 piece jigsaw activity solution. 'Simplified version' displays the central six triangles only. To switch to solution preview select the button 'Solution' in the navigation bar at the bottom of the window.



It is possible to change the puzzle to another format without losing all your inputs by going to

File > Properties

Saving: Tarsia puzzles save as *.xjsw files, which are not compatible with anything else and which can only be opened on computers where Tarsia is installed. To facilitate sharing of the puzzle and its solution it should be saved in pdf formant.