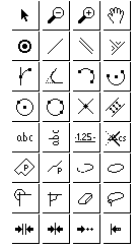


# PYTHAGORAS



## The Toolbox Quick Reference Guide



**Select**



**Zoom Out**



**Zoom In**



**Pan**

<b>What does it do?</b>	Selects objects	Zooms Out	Zooms in	Moves the drawing on the screen
<b>How do you use it?</b>	Click on the object Or Click and drag a rectangle over the objects.	Click on the tool.	Click on the screen. It will zoom in by a factor 2. Or, Click and drag a rectangle on the screen	Click and drag. The screen will be redrawn when the mouse button is released.
<b>Additional Info</b>	Hold down the Shift key while clicking your mouse button, to add objects to the selection.	Will revert to the previous zoom-out level.		



**Point**



**Line or Curve**



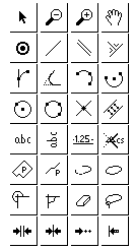
**Parallel Line**



**Perpendicular Line**

<b>What does it do?</b>	Places a point in the drawing	Draws a line or circular curve	Draws a line or circular curve that is parallel to another line or curve	Draws a line or circular curve that is perpendicular to another line or curve
<b>How do you use it?</b>	Click on the drawing. You can confirm the exact coordinates in the control panel before clicking OK in the control panel.	Click the starting point of the line. Then click the end point of the line. Before confirming, you can edit the coordinates of the end point, the length or the bearing of the line, by hitting TAB on your keyboard.	Click on the line or curve to which you want to remain parallel. Then click wherever you want the the parallel line to start. Then click the ending point of the parallel line.	Click on the line to which you want to remain perpendicular. Then click wherever you want the the perpendicular line to start. Then click the ending point of the perpendicular line.
<b>Additional Info</b>	- Use the TAB key to move from field to field in the control panel. - If you place a point on a line, you can enter the distance to either of the end points of the line, before confirming.	- If the starting point or end point do not already exist, Pythagoras will ask to confirm the point placement (refer to placing points). - To convert a line into a circular curve, hit the space bar on your keyboard while drawing the line		

# PYTHAGORAS



## The Toolbox Quick Reference Guide



### Tangent Curve



### Curve Tangent to 2 lines



### Curve through 3 Points



### Curve with Center and Radius

	Tangent Curve	Curve Tangent to 2 lines	Curve through 3 Points	Curve with Center and Radius
<b>What does it do?</b>	Draws a circular curve that is tangent to a line or curve	Draws a circular curve that is tangent to two lines	Draws a circular curve that is defined by 3 points	Draws a circular curve that is defined by its center point and a radius
<b>How do you use it?</b>	Click to identify the starting point of the curve (must be on a line or curve). You can confirm the exact distance to one of the end points of the line. Then click to identify the end point of the curve.	Click the first line, then click the second line. A circular curve will pop up. Now confirm the exact placement of the circular curve.	Click the first point, click the second point, click the third point. The curve will be drawn after you clicked the last point.	Click the center point of the circular curve. Then click the starting point of the curve. Then click the end point of the curve.
<b>Additional Info</b>	Before confirming the curve, you can enter the exact radius or center angle (delta) in the control panel, by hitting TAB on your keyboard.		If the points don't already exist, you will need to create them first.	



### Circle



### Circle through 3 Points



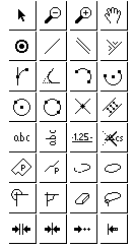
### Intersection



### Parallel Object

	Circle	Circle through 3 Points	Intersection	Parallel Object
<b>What does it do?</b>	Draws a circle that is defined by its center point and a radius	Draws a circle that goes through 3 points	Calculates the Intersection point between two lines or two circular curves or one of each	Draws a parallel line, curve or circle
<b>How do you use it?</b>	Click the center point of the circle. A circle pops up. Then click to specify the radius of the circle.	Click the first point, click the second point, click the third point. The circle will be drawn after you clicked the last point.	Click the first line. Then click the second line (or curve). Pythagoras will calculate and place a new point on the screen (a little X) that represents the intersection point.	Click the first object, e.g. a line. A parallel object will be created. Click again to define the location of the parallel object.
<b>Additional Info</b>		If the points don't already exist, you will need to create them first.		By holding down the Shift-key, you can select multiple objects at once.

# PYTHAGORAS



## The Toolbox Quick Reference Guide



**Text**



**Parallel Text**



**Dimension**



**Coordinate System**

	<b>Text</b>	<b>Parallel Text</b>	<b>Dimension</b>	<b>Coordinate System</b>
<b>What does it do?</b>	Places horizontal or vertical text on the drawing	Places text on the drawing that is parallel to a line or a curve	Annotates the dimension of the object (e.g. a line)	Creates a User Coordinate System
<b>How do you use it?</b>	Click the location where you would like the text to appear. A dialog box will pop up. You can now enter the text. Click OK to confirm.	First click on the object (e.g. a line) to which you would like the text to remain parallel. Then click the location where you would like the text to appear. A dialog box will pop up. You can now enter the text. Click to confirm.	Click on a line or curve, the length of the line or curve will be annotated.	Click on a point that represents the origin of the user coordinate system. Then click on a point that is on the North-axis. The new coordinate system will be reflected in the control panel.
<b>Additional Info</b>	Hit the space bar to switch between horizontal and vertical text.		For additional annotations, use the menu option Tools - Annotation.	To return to the original coordinate system, select it in the control panel.



**Polygon**



**Path**



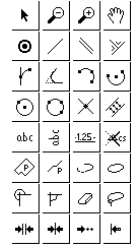
**Open Spline**



**Closed Spline**

	<b>Polygon</b>	<b>Path</b>	<b>Open Spline</b>	<b>Closed Spline</b>
<b>What does it do?</b>	Creates a Polygon	Creates a Path	Creates an open spline	Creates a closed spline
<b>How do you use it?</b>	Click on the first point of the polygon, then click all points that make up the polygon in sequence. End by clicking on the first point again.	Click on the point that represents the beginning of the path. Then click all points that make up the path, in sequence. End by clicking on the first point again.	Click on the point that represents the beginning of the spline. Then click all points that make up the spline, in sequence. End by clicking on the first point again.	Click on the first point of the spline. Then click all points that make up the spline in sequence. End by clicking on the first point again.
<b>Additional Info</b>	If you want the polygon to follow a curve, click on the curve instead of its end point.	Paths can be used to identify e.g. the centerline of a road.	After creating the curve, use the menu option Format - Curvature to change the curvature, if needed.	Splines are used, for example, for contour lines.

# PYTHAGORAS



## The Toolbox Quick Reference Guide



### Cut Off Inside



### Cut Off Outside



### Eraser



### Lasso

<b>What does it do?</b>	Deletes all objects inside a rectangle	Deletes all objects outside a rectangle	Erases part of a raster image	Paints black or white a portion of a raster image
<b>How do you use it?</b>	Click and drag a rectangle on the drawing. All objects inside the rectangle will be deleted.	Click and drag a rectangle on the drawing. All objects outside the rectangle will be deleted.	Use it like an eraser to erase parts of a raster image	Draw a circle or an irregular shape on the raster image. End by returning to the starting point.
<b>Additional Info</b>	Can also be used to edit raster images	Can also be used to edit raster images	Only works on raster images	Only works on raster images.

Note : The 4 Toolbox items below are for Pythagoras Power Users. If you're new to Pythagoras, you may want to skip them at first.



### Cut Object



### Divide Object



### Extend Line



### Join Objects

<b>What does it do?</b>	Removes part of an object (e.g. a line), defined by 2 points of intersection	Divides a line or circular curve in 2 parts	Extends or Shortens a line or circular curve	Extends or Trims a line or circular curve
<b>How do you use it?</b>	Click the object that needs to be cut out. Then click the first cutting edge (i.e. a point, a line or a curve), then click the next cutting edge.	Click on the line or curve that you want to divide. Then click on the object that needs to divide the first object (a point, line or curve).	Click the line or circular curve that you want to extend or shorten. Then click the end-point that you want extended or shortened. Finally, drag this point to extend or shorten the line.	Click on the line or curve that you want to change. Then click on another line or curve. The first line will be extended or trimmed to the second line.
<b>Additional Info</b>	Only for Pythagoras Power users!	Points can also be dividing points, whether they are on the line or not.		If you double-click the second line, this second line will also be extended or trimmed.

Note : This Quick reference guide only contains a brief description of the toolbox items. For a complete description, please refer to the Reference Manual.