Runes Library

• Use **show(rune)** to display the rune.

Rune (Shape)	Reference Image
black_bb	
blank_bb	
rcross_bb	
sail_bb	
corner_bb	
nova_bb	
circle_bb	
heart_bb	
pentagram_bb	
ribbon_bb	

Transformation functions

- scale(ratio, shape): Scales the shape to the ratio
- scale_independent(ratio_x, ratio_y, shape): Scales the shape by ratio_x along the x-axis and ratio_y along the y-axis
- translate(x, y, shape): Shifts the shape by x amount along the x-axis and y amount along the y-axis
- rotate(rad, shape): Rotates the shape by rad amount in radians in the counter-clockwise direction
- stack(shape1, shape2): Stacks shape1 onto shape2 with equal proportions (i.e. $\frac{1}{2}$)
- stack_frac(frac, shape1, shape2): Stacks shape1 onto shape2 such that the ratio of shape1: shape2 equals to frac
- stackn(n, shape): Stacks n times of shape with equal proportions (i.e. $\frac{1}{n}$)
- quarter_turn_right(shape): Rotates the shape clockwise by $\frac{\pi}{2}$
- quarter_turn_left(shape): Rotates the shape counter-clockwise by $\frac{\pi}{2}$
- ullet turn_upside_down(shape): Rotates the shape by π
- beside(shape1, shape2): Puts shape1 to the left of shape2 with equal proportions
- beside_frac(frac, shape1, shape2): Puts shape1 to the left of shape2 such that the ratio of shape1 : shape2 equals to frac
- flip_vert(shape): Flips the shape vertically along the x-axis
- flip_horiz(shape): Flips the shape horizontally along the y-axis
- make cross(shape):

Example sail_bb



• repeat_pattern(n, pattern, shape): Repeats the pattern function applied to the shape n times

Example

repeat_pattern(2, make_cross, sail_bb)

- overlay(shape1, shape2): Overlays shape1 on top of shape2 with equal proportions [3D rune]
- overlay_frac(frac, shape1, shape2): Overlays shape1 on top of shape2 such that the ratio of shape1 : shape2 equals to frac [3D rune]

3D Display Functions

stereogram(shape): <u>Example</u> stereogram(heart_bb)



anaglyph(shape):Exampleanaglyph(heart_bb)



hollusion(shape)

Colors

- red
- pink
- purple
- indigo
- blue
- green
- yellow
- orange
- brown
- black
- white

Feel free to be experiment with all these runes and functions at your disposal! The most creative rune master will have his rune displayed on the Grandmaster's wall at the end of the Runes 2D and 3D contests!