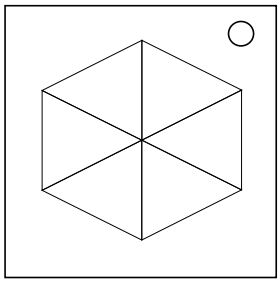
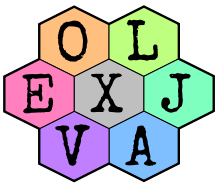
On the Subject of Tetriamonds



Counting to four! It's not just one more?

This module will display six triangles in the shape of a hexagon. The triangles will not flash, but they will move out from the center and return when the sequence finishes. This will be referred to as a pulse. Triangles will also either face left or right. The colours are: rose, orange, lime, jade, azure, violet and grey. In order to determine what triangles to press, follow the following rules.

Determining colours



Whenever you apply any rule after rule 1, you should continue to the next section. The order will not be determined by this step. The graph refers to the image on the right.

1. Select the pulsed colours on their positions on the graph.
2. If none of your colours were grey, or the non-grey colours are adjacent on the graph, your colours are the unselected four colours on the graph.
3. If the three colours form a straight line on the graph, your colours are the selected colours plus the first unselected colour clockwise on the module from the first pulsing triangle.
4. Otherwise, your colours are the selected colours plus the colour opposite on the graph of the first non-grey piece.

Determining shape

Only one rule applies every time.

1. If all three pulsing triangles have the same orientation, construct a triangle.
2. If the first two pieces match in orientation, construct a rhomboid.
3. If both rules did not apply, construct a U-shape.

Determining order

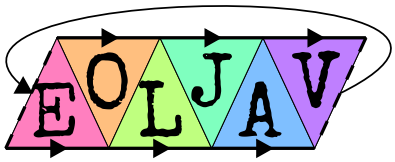
Always add colours to the end of your current order. Start with an empty array as the order.

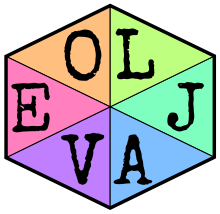
1. Take all pulsing colours and add them to the order.
2. For each pulsing triangle, add the first colour clockwise from it that is not present in the order to the order.
3. Add the colour that did not appear on the module.

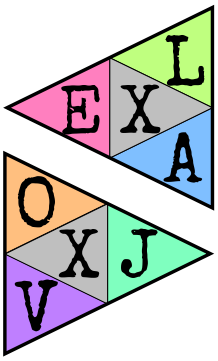
Constructing shape

Use the graph based on the shape. For a U-shape look at the hexagonal graph, for a triangle at both the triangular graphs and for the rhomboid at the rhomboidal graph (which wraps around). If the shape is invalid, go to the subsection about invalid shapes.

1. Place your colours on the graph where possible. Grey can be placed anywhere and anything can be placed on grey, but grey prefers staying on grey.
2. If your shape can not be constructed with the given colours, or there are multiple possibilities without any preference, it's invalid.
3. If your shape is a rhomboid, rotate the graph so the direction of your graph (indicated by the small arrows) lines up with the the direction from the first pulsing triangle to the second.







Invalid shapes

To make an invalid shape valid, remove the last non-grey colour in order from your shape, and replace it with the first available non-grey colour in order that does make it valid and reconstruct your shape.

Submitting the tetriamond

U-shape

Press the triangles according to the shape and order you obtained.

Triangle

Map the triangle onto the hexagon. Since a wraparound is required to map all four triangles onto the module, wrap around the last outer triangle. Then press the triangles according to the mapping on the module and the order you obtained earlier.

Rhomboid

Since the rhomboid can't be mapped onto the module without wrapping around, make it wrap around in the middle cut of the shape. Then press the triangles according to the mapping on the module and the order you obtained earlier.

Terminology

- Wraparound: the edges connect to the opposite edges to form a seemingly infinite grid.