# On the Subject of Triamonds

Counting to three! How hard can it be?

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 up or down. In order to determine what triangles to press, follow the following rules.
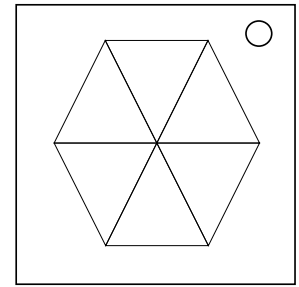
Determining colour and orientation

1. First, obtain the colours and orientations in the order they pulsed.
2. If the triangle that pulsed second, has the same orientation as the first, flip the orientation and the colour of the second triangle. Opposite colours are black-white; red-cyan; green-magenta; blue-yellow.
3. If the previous rule caused duplicate colours to occur in the sequence, flip the colour of the other triangle responsible for this conflict as well.

Forming the triamond

If at any point during the rules all three triangles are already placed on the board and they are all adjacent you have obtained your triamond. Whenever this happens, continue to the submit part. The board refers to the image next to this text.
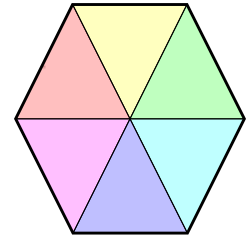
1. Try to place your coloured (not black or white) triangles on the board in their given orientation.
2. If any triangle can not be placed due to incorrect orientation, place it at the position of the inverted colour.
3. If the previous rule caused overlapping triangles do not apply it on the triangle with the incorrect colour and skip to rule 12.
4. If two triangles are opposite, assume the hexagon is wraparound and attach them to eachother.
5. If white did not pulse, but black did and should not be in the center, place it adjacent to any other triangle, but outside of the hexagon.
6. If the previous rule should have been taken, but was not possible due to rule 4, place the black piece counterclockwise from the other outer piece.
7. If white did not pulse, but black did and should be in the center, swap the coloured pieces and place the black piece inbetween.

8. If black did not pulse, but white did, place it within the hexagon so it forms a triamond.

9. If there were multiple options for the previous rule due to rule 4, place it clockwise from the other outer piece.

10. If both black and white pulsed, and black should not be the center piece, place the pieces so that the black piece is counterclockwise from the other outer piece and the black piece is outside of the hexagon.

11. If both black and white pulsed, and black should be in the center, place the black piece outside of the hexagon, adjacent to the coloured piece, and place the white piece clockwise from the other outer piece.

12. If black pulsed, place it adjacent and outside the hexagon, and place the remaining colour counterclockwise from its opposite.

13. If white pulsed, place it adjacent and inside the hexagon, so that the remaining colour can be placed clockwise from the other colour, while still fitting within the hexagon.

14. Otherwise place the colour of which no opposite exists in the sequence on the preferred position according to the first two rules, and then place the remaining triangle within the hexagon in order to create a triamond.
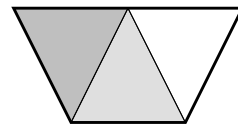
Submitting your triamond

Shift your triamond until it fits inside the hexagon and press the triangles in the order you obtained them from the module.