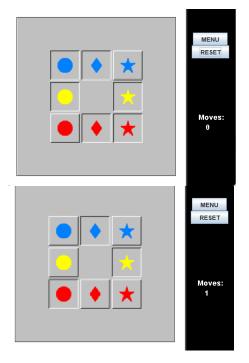
#### Game 8:

### Step1:

From the begging in there are only two possible choices of button to push from the corner or the 3x3 grid.

Options: Blue star / Red Circle

Selected: Red Circle:



# Remember:

There are two possible beginning choices to click: (Chose RED: Blue remains)

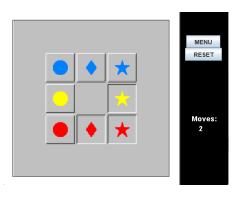
### Result:

After pressing the red circle, the buttons adjacent to the columns and rows of the red circle are now clickable:

Step 2:

Options: Blue Circle, Bule Star, Yellow Circle, Red diamond, Red Star

Selected: Red Diamond



## Result:

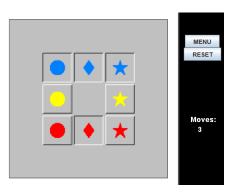
After pressing the red circle, the buttons adjacent to the columns and rows of the red circle are now clickable:

NOTE: The combination may be symmetrical since the red star is suddenly not clickable

### Step 3:

Options: Blue Circle, Bule Star, Yellow Circle, Red diamond, Red Star

Selected: Blue Star



#### Result:

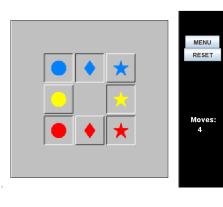
After pressing the blue star, the buttons on the right-hand side have become clickable and the symmetrical button patter I had intended has been removed.

NOTE: The button clicks are not entirely symmetrical.

Step 4:

Options: Yellow, Circle, Red Circle, Yellow Star, Red Star

Selected: Red Star



#### Result:

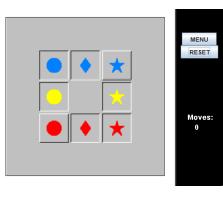
After pressing the red star, the buttons on the left-hand side have become clickable and the symmetrical button patter I had intended has been removed.

NOTE: The button clicks are not entirely symmetrical.

I think that the moves taken have reached an incorrect account. I will restart the puzzle to try again

### Restart

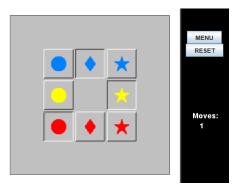
Selected: Red Circle:



### Remember:

There are two possible beginning choices to click: (Chose RED: Blue remains).

Since this is the beginning, I will continue to begin clicking buttons from the red circle and repeat the previous 2 steps.



### Result:

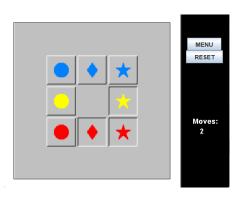
After pressing the red circle, the buttons adjacent to the columns and rows of the red circle are now clickable.

Since I have pushed these buttons before I will push red again to get to the closest last result.

Step 2:

Options: Blue Circle, Bule Star, Yellow Circle, Red diamond, Red Star

Selected: Red Diamond



### Result:

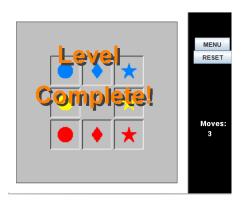
After pressing the red circle, the buttons adjacent to the columns and rows of the red circle are now clickable:

NOTE: The combination may be symmetrical since the red star is suddenly not clickable

Step 3:

Options: Blue Circle, Bule Star, Blue Diamond, Yellow Circle, Red Circle.

Selected: Blue Circle



### First Success:

NOTE: That from what corner you begin at it seems the one next to it which is unable to be clicked ends the game when followed by the remaining corner button. I will try to keep this strategy in mind next round. If I can repeat this strategy I will have found the answer to game 8.

## Repeat Experiment: OTHER SOLUTIONS TO PUZZLE 1

Trial # 1

Red Circle -> Red Diamond ->	Blue Circle	SUCCESS	3 moves

Trial # 2

Blue Star -> Blue diamond -> Red Star SUCCESS 3 moves

Trial #3

Blue Star -> Yellow Star -> Blue Circle SUCCESS 3 moves

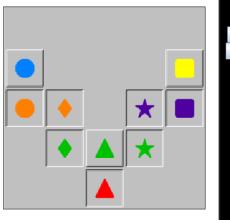
Trial #4

Red Circle -> Yellow Circle -> Red Star SUCCESS 3 moves

#### Game 17

## Red Triangle:

## Step#1

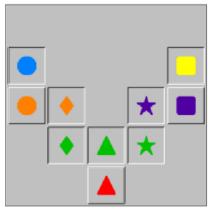




From the beginning I could tell that the solution to this puzzle will be symmetrical. The top two buttons are the first two buttons which I clicked.

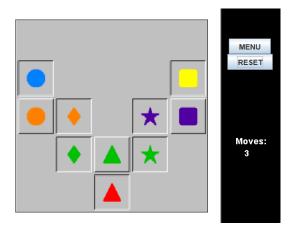
Both above buttons when clicked result in a similar outcome, pressing both the blue circle and yellow square both raise the below blue square and orange circle.

## Result:





### Step#2



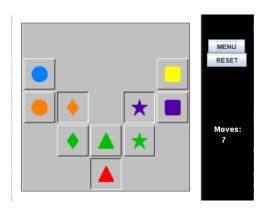
After pressing each distant button square (Blue Circle, Yellow Square and Red Triangle, the adjacent squares activate. I believe this is still the best route as the inactivated buttons are the key to completing the puzzle.

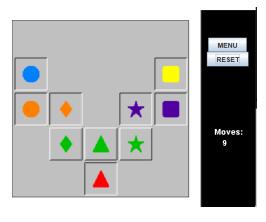
### Step#3

After clicking the Orange Circle, the orange diamond appears and is clicked. Simultaneously after clicking the Blue Square, the blue star is activated and is clicked giving this configuration.

NOTE: After clicking the red reiangle it deactivates and clicking on the green triangle it reactivates the red triangle. It seems the red triangle needs to remain deactivated fot the puzzle to be solved as clicking the green triangle nesecitates repeating steps unnessacarily.

## Result:





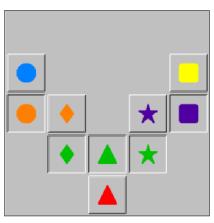
After pressing each distant corner button square (Blue, Square and Orange Circle). The Corner buttons deactivate. I think this has exceeded the move counter is coming close to growing too great.

I may need to restart and once reaching the previous configuration click the green buttons to complete the puzzle.

### Round 2

### Initial Step:

Beginning with clicking the top two corner buttons and then clicking both corners adjacent downward buttons I end up with this configuration.

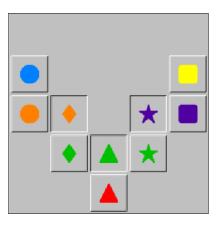




At this configuration I know that the green buttons need to be activated in their entirety to avoid a repeating loop pattern of constant reactivations.

To activate the green buttons below (Green diamond and Green star). The blue star and the orange diamond need to be clicked.

### Result:

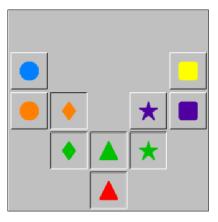




At this configuration I know that the green buttons still need to be activated in their entirety to avoid a repeating loop pattern of constant reactivations.

To activate the last green buttons below (Green Triangle). The Red triangle needs to be clicked.

And then to get rid of the activated green buttons. I recalled the green Star eliminates the adjacent green buttons in the previous attempt.





At this configuration am close to the answer. If I click the blue square all the adjacent buttons deactivate.

And by clicking the blue circle button, the blue circle deactivates.

.





Success in 10 moves!!

### Alternate Solution:

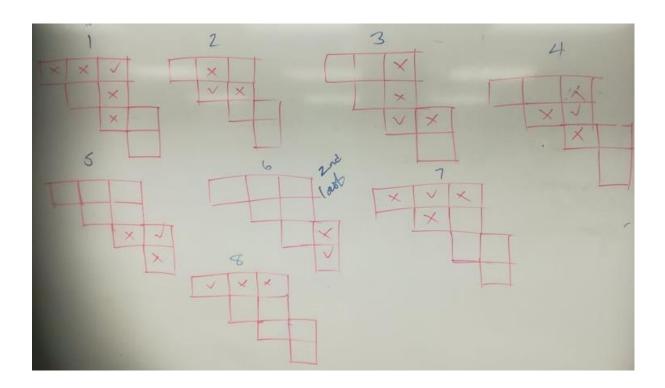
Another way to solve the second puzzle (game 17). Is by performing the initial steps leading up to picture number 4. The red diamond button can be clicked and left until the green buttons are activated as shown on slide 4. And for concluding the puzzle, since the puzzle is symmetrical. The method to deactivate the remaining buttons can be performed in mirrored order. This leads to 2 additional was to solve the second puzzle.

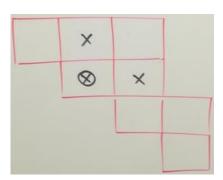
### Game 24

My initial attempt at this game resulted in 14 steps but upon inspection I thought it could be done in fewer moves. Knowing the shape of this puzzle is not symmetrical. I can trust that using methods and memorisation related to symmetry is not going to be an effective strategy of solving this puzzle.

# Initial Attempt:

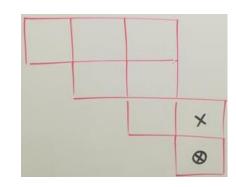
TO help keep track of my moves and button effects I have made a diagram containing all possible button effects.





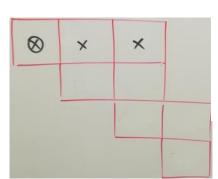
Button#2

Blue Star



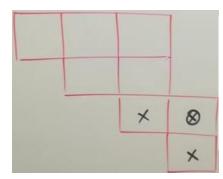
Button#6

Blue X



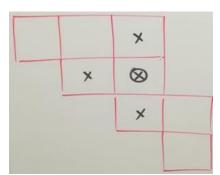
Button#8

**Green Diamond** 



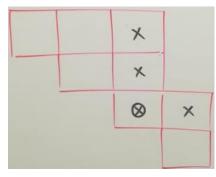
Button#5

Blue Square



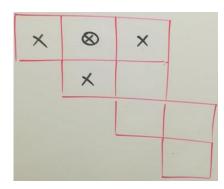
Button#4

Yellow Star



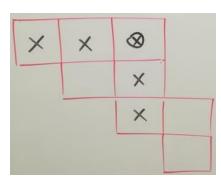
Button#3

Yellow Square



Button#7

Blue diamond



Button#1

Yellow Diamond

From this stage I pressed button 2 to begin the test, this was my initial attempt to identify any commonality of puzzle traits. Following this I clicked button 3 to eliminate the need to click button 5.

Following these two moves, I clicked button 4, this reactivated button 1 which would be useful in later steps. Then I clicked button 6 to eliminate the distant button, this being button number 5. Button 5 is the only individual button affected by only one other button click. It will not be a concern later by the effect of anymore subsequent button clicks.

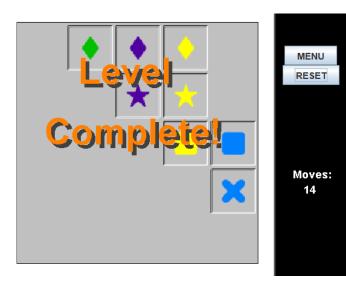
Then I clicked the 5<sup>th</sup> button which reactivate button 3. From this I clicked button 1 to eliminate many previously activated and deactivated buttons. Button 1 affected buttons 3, 4, 7 and 8.

NOTE: By some epiphany I noticed that ending the button pattern completion with button pattern 7 then button 4. All the buttons would be deactivated.

After this realisation, I clicked button 2 which reactivated button 8. With button 8 reactivated. I then clicked button 3 which then allowed me to reactivate button 1.

Button 8 can now be clicked since it was reactivated.

From this point on there was a decent amount of trial and error before the combination of using buttons 7 and then 4 could be executed. A problem I often got stuck with solving was that in the wrong sequence of button clicks. Buttons 8 and 7 will reactivate each other in tandem with their adjacent button if they are clicked. I repeated the previous steps order twice before realising that faster pushing buttons 5 and 1 following pushing the previously mentioned button presses. I could click buttons 7 and four complete the game in 14 steps.

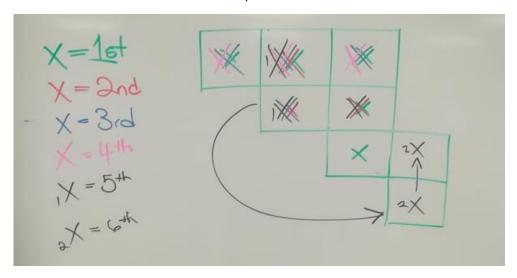


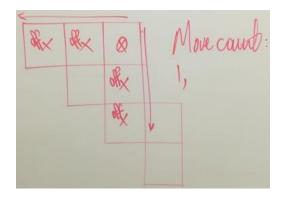
Move order:

2, 3, 4, 6, 5, 1, 2, 3, 1, 8, 5, 1, 7, 4 Total Count: 14 moves

### Attempt 2:

I noticed that by pressing the 5<sup>th</sup> button the buttons bellow it were deactivated. Then it had occurred to me that each button that when each button is clicked, all other buttons which directly follow an x, y grid plot adjacent to the clicked button also activate or deactivate depending on their condition. The blue x button (button 6) is not affected by any other button combination and thusly I concluded it should be the last button pressed.

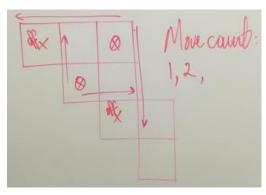




### Button#1

## Yellow Diamond

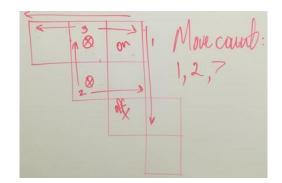
This was the first button to click. After several failed attempts and following my conclusions to press button 6 last due to its minimal effect. This button was the first to click.



#### Button#2

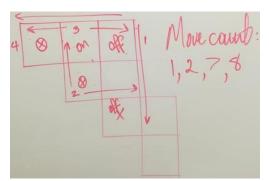
#### Blue Star

During an attempt to complete the puzzle. I noticed the to press button 4. Would begin a infinite loop of having to press buttons 7 and 8 in succession. Leading to a failed outcome of minimal moves. Thus pressing button 2 was the better option.



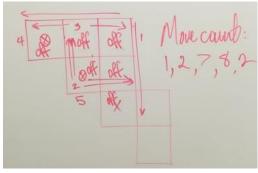
Button#7

Blue Star



Button#8

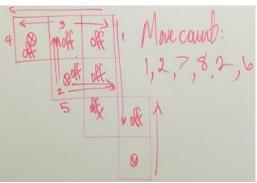
Green Diamond



Button#2

Blue Star

This button clicked again completes disabling all the buttons in the larger section of the puzzle. You could consider button 6 entirely independent of the other larger puzzle section.



Button#2

Blue Star

This button clicked again completes disabling all the buttons in the larger section of the puzzle. You could consider button 6 entirely independent of the other larger puzzle section.

During various strategic attempts of decreasing my move count I noticed that when looking at the move picture diagram. The combination of pressing buttons labelled 1, 2,7 and 8, the 2 button is activated again.

After clicking button 2 all that remained Is button 6 to deactivate. This completed the puzzle in what could only be a minimum of 6 button clicks.

Total move count: 6

Order: 1,2,7,8,2,6

#### Conclusion:

After completing each of the three puzzles in this assessment. Puzzle game numbers 8,17 and 24. I noticed that the one common feature each puzzle shares with the other is the activation and deactivation of adjacent buttons along each x, y axis. Though this is relevant to solving a puzzle its impact is also determined based on the layout of the puzzle buttons. If a puzzle is arranged symmetrically or in a uniform shape. Determining which buttons need to be clicked in which order will likely be much easier.

Another observation which could be made for all three of these puzzles to be completed is that each puzzle can be completed or finished with the click of a blue symbolled button. Though this is may be coincidental, as other games may in fact be complete differently. The optimum completion moves counts for the past 3 games has always ended on a blue button click.

My recommendation for completing additional puzzles in the game is to employ the use of the above mentions techniques and to also create a map of which game you are playing and which buttons when clicked influence other buttons shown in the documentation above. This will help you determine the various pitfalls of each puzzle and isolate an optimum procedure for completing the game.