



TI-73 EXPLORER™

7TH GRADE ACTIVITY 3:

LOGIC LADDER CLASSIC

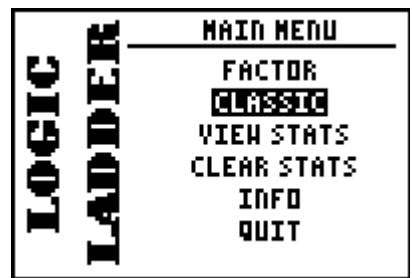
ACTIVITY OVERVIEW:

In this activity we will

Develop problem solving strategies and pattern recognition in terms of logic

Note: You will need the logic ladder application to do this activity.

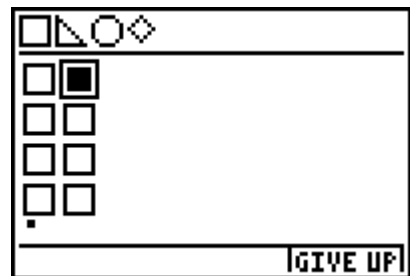
Open the Logic Ladder application by pressing the 9 key. Arrow to Logic Ladder and press β three times to get to the screen at the right. Arrow down to the Classic game and press β . Press β two more times.



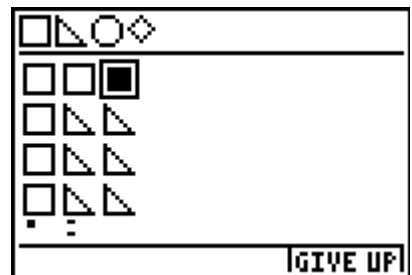
The objective is to determine the specific shapes and the order of the shapes. The game begins with four squares and a display of the four different shapes above. Use the up and down arrows to move to a specific position and use the left and right arrows to change the shape in each position.



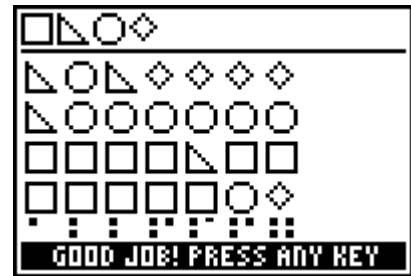
If you press β , you get to see if your shapes are correct and in the correct order. Any square marks in the bottom indicate how many (if any) correct shapes are in the correct place. In the example on the right, you know that there is one square in the correct solution and it is in the correct place. Since there are four squares you don't know which one is correct but you can be sure there is only ONE square.



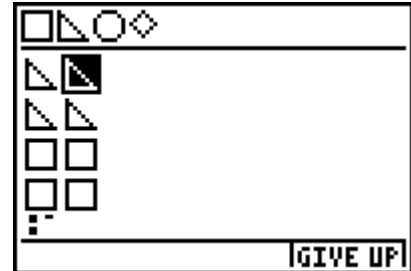
You can change your attempt by arrowing up and down and changing the shapes with left and right arrows. In the picture at the right, the second guess has two correct shapes but neither is in the correct place, this is shown by the two small lines at the bottom. In this example, there are a square and a triangle in the solution but neither is in the correct position.



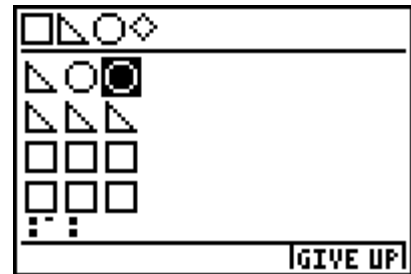
When your guess includes all of the correct shapes in the correct order, you will have 4 solid squares on the bottom and get a "GOOD JOB" message.



One goal should be to develop strategies that will move you toward the correct solution. In the example to the right, how many of the shapes are correct?_____ How many of the shapes are in the correct position?_____ Do you know which shape will have two of it in the solution?_____ How many other shapes will be in the solution?_____



Now, we can see that by removing the top triangle, there are only two correct shapes both in the correct space. What predictions can you make about the shapes?_____



You get a total of 8 guesses before the game ends. See how good you can get at strategies for each guess.