

Chocolate Fix



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Mathematics
Festival**



App

jrmf.org



Objective

- Fill the box with all different chocolates, according to the clues.
- Clues give information about the positions of the chocolate flavors or shapes.

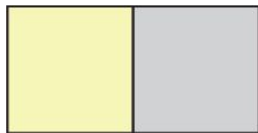
Rules

- For a 2x2 box, there are 2 flavors - white and milk - and 2 shapes - triangles and circles.
- Each chocolate appears exactly once in a box.
- Each clue's pattern must appear in the box.

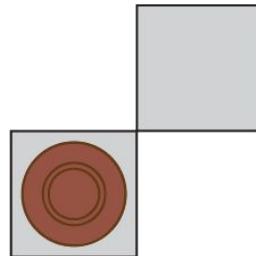
Two Correct and One Incorrect Clue



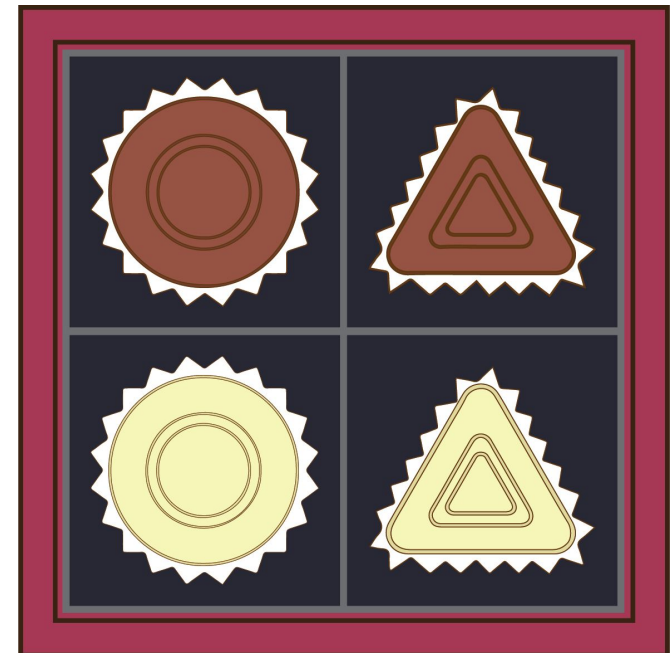
In a column, there are 2 triangles.



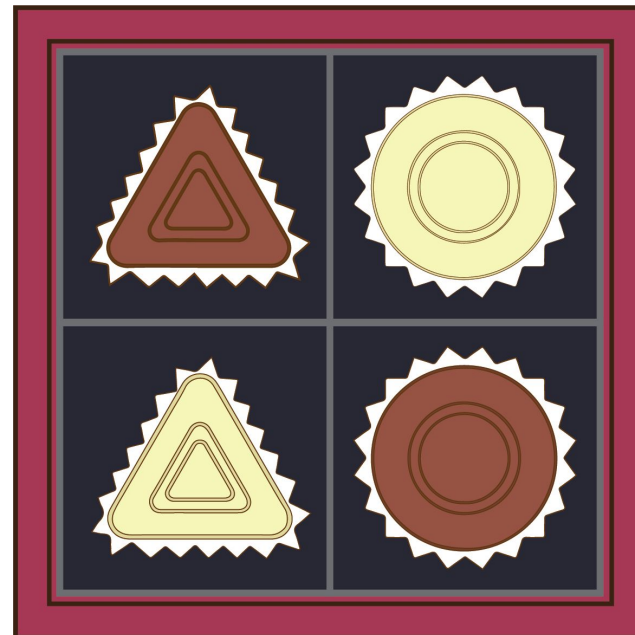
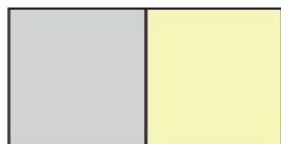
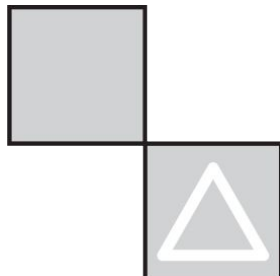
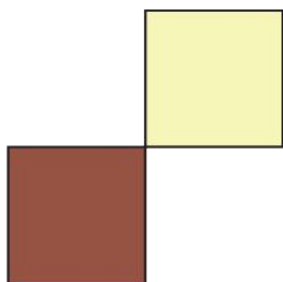
In a row, a white chocolate is on the left.



On the lower left, there is a circular milk chocolate.



Which of these clues could be used for this box?



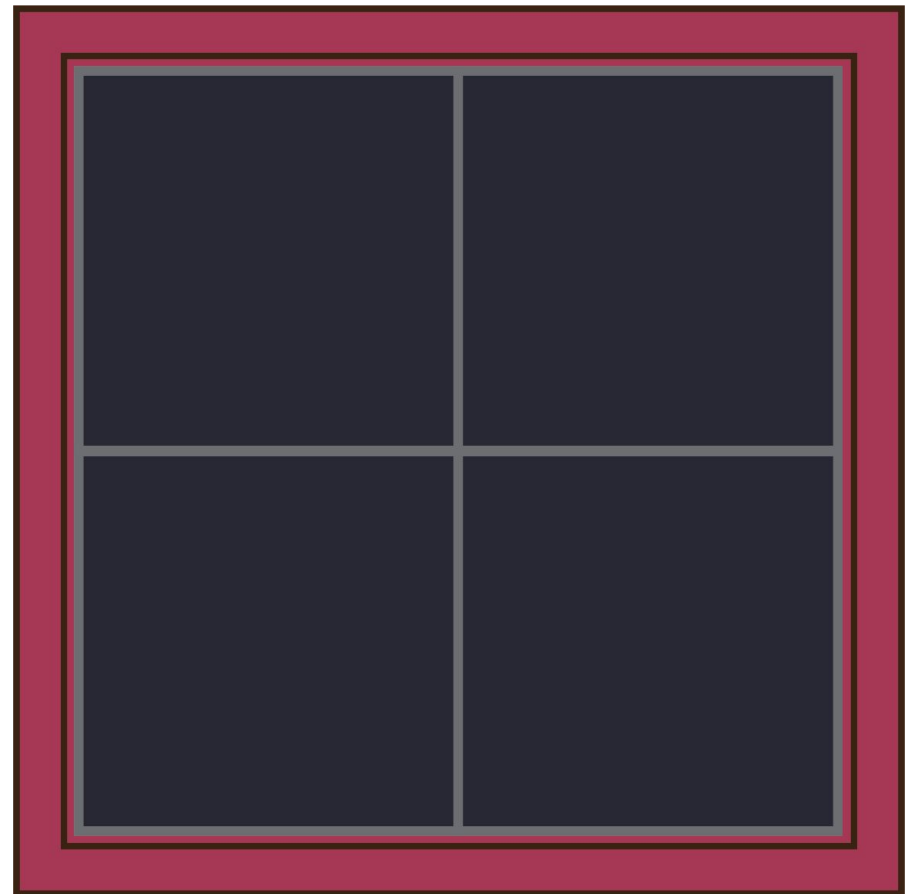
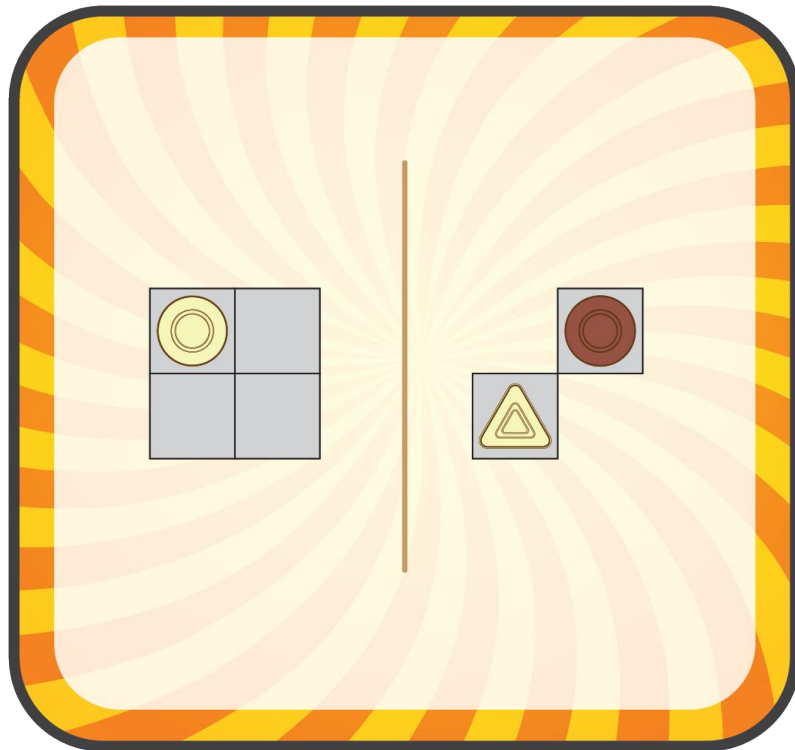
What other clues can you make for this box?



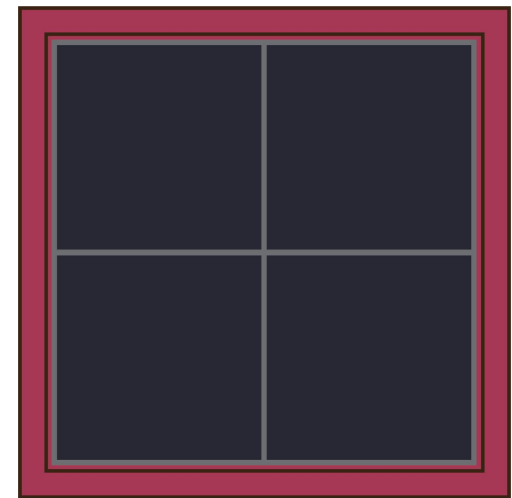
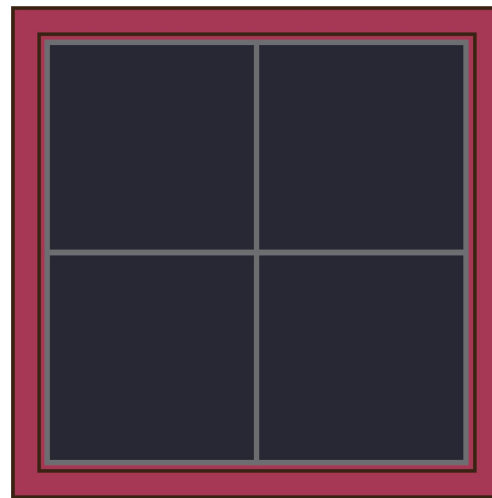
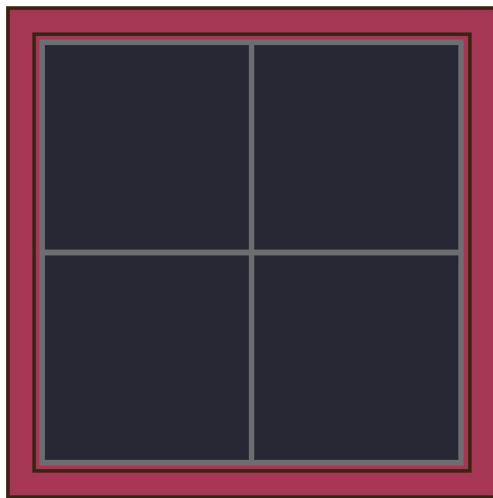
Use the clues below to fill the chocolate box.

Clues

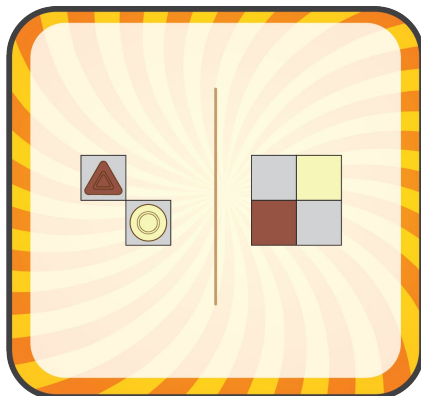
1



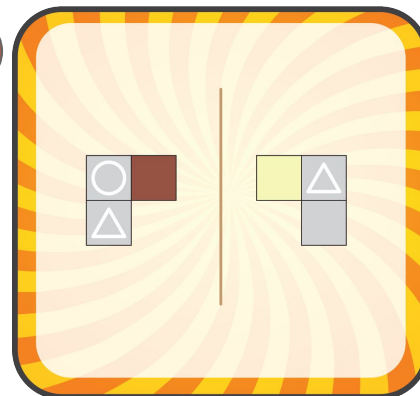
Using the clues below, can you fill each of the chocolate boxes? If so, how? If not, why not?



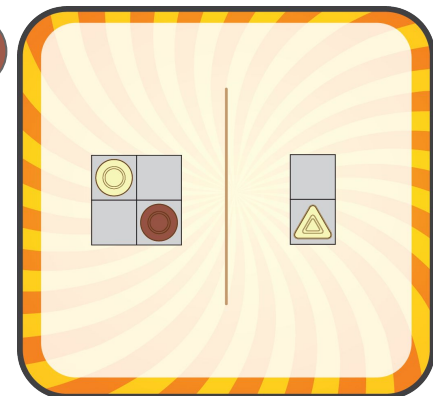
2



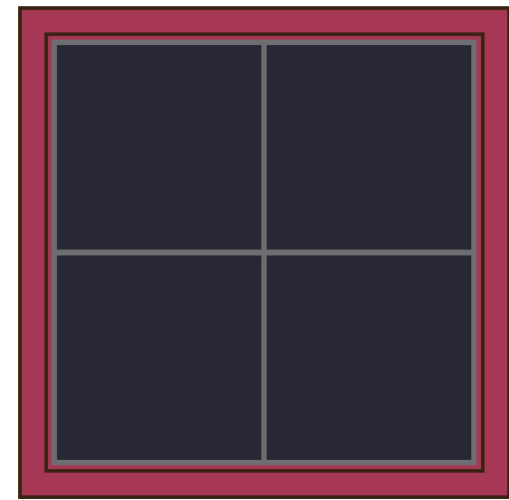
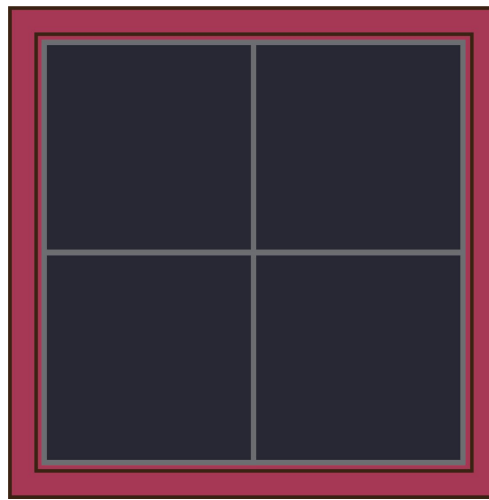
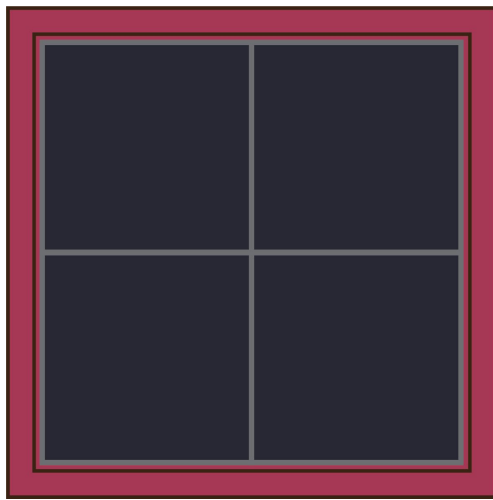
3



4



Using the clues below, can you fill each of the chocolate boxes? If so, how? If not, why not?



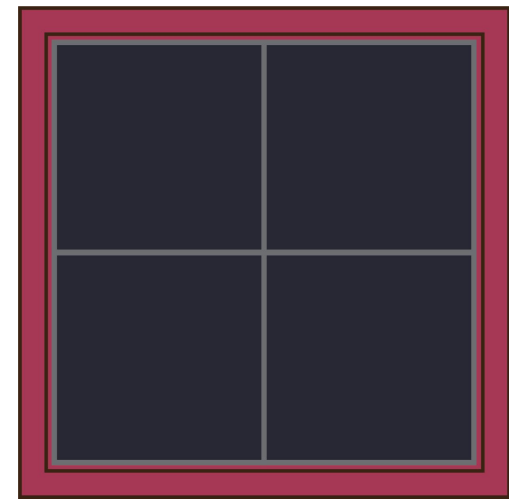
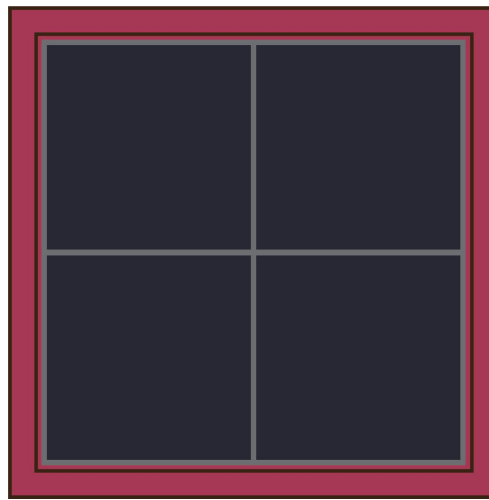
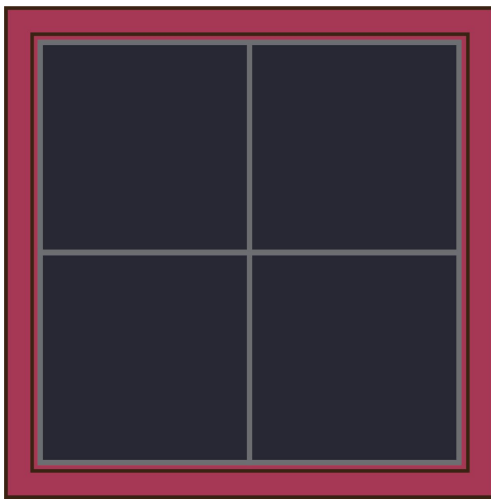
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6

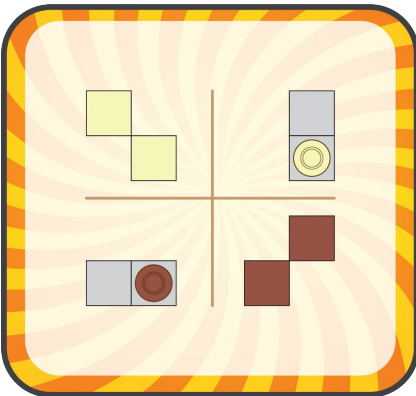
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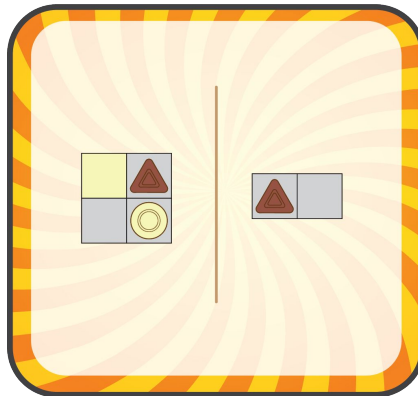
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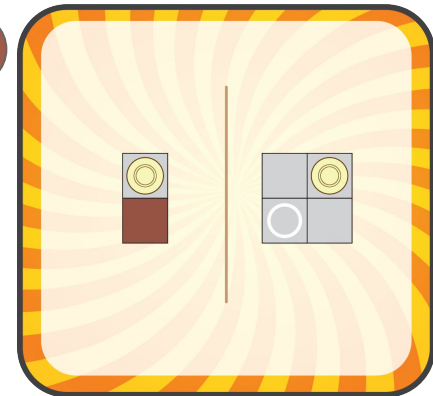
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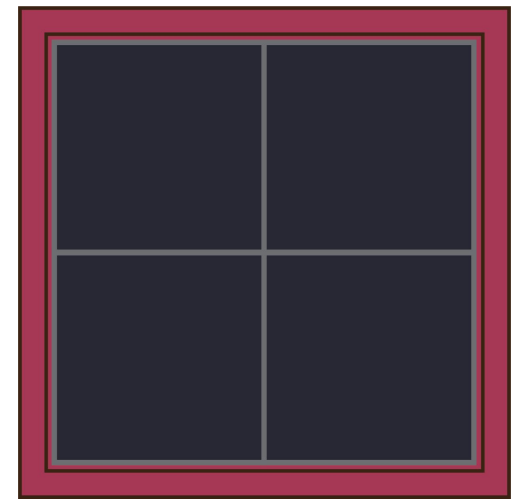
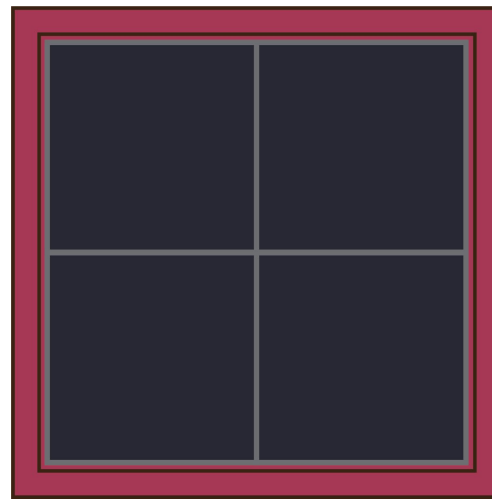
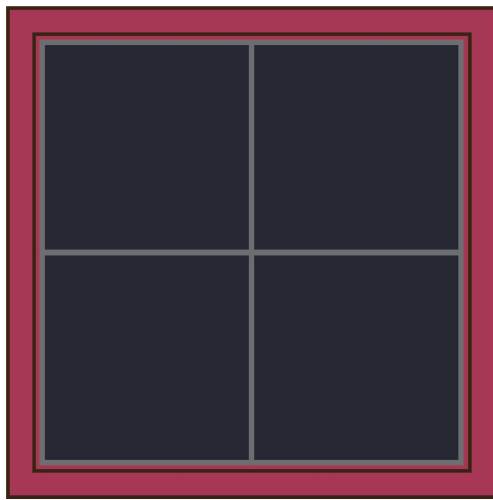
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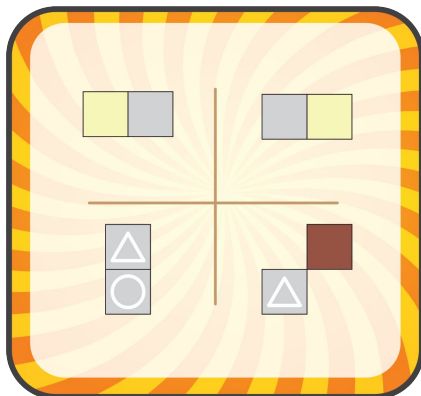
10



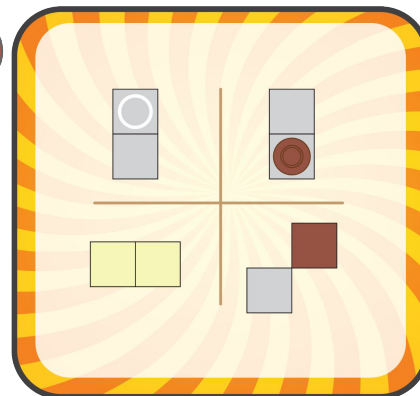
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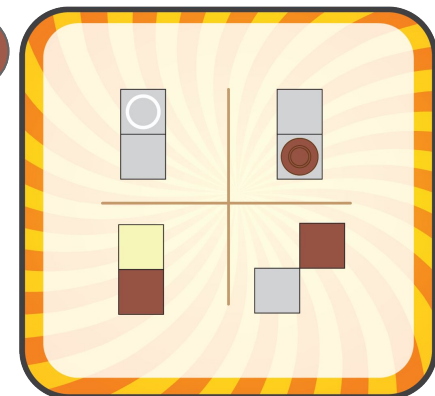
11



12

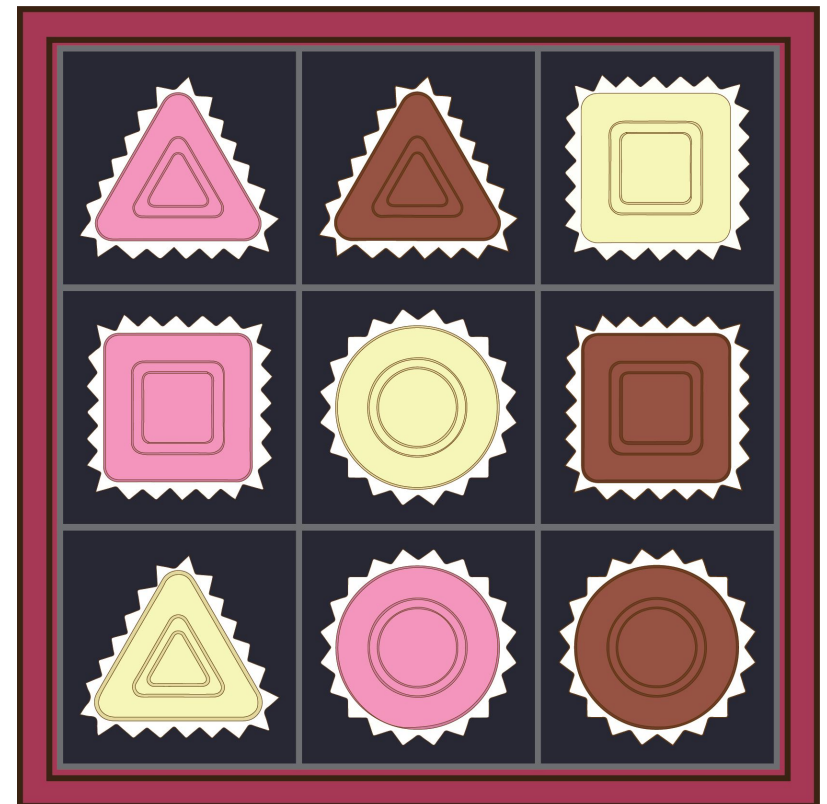
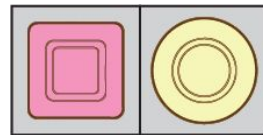
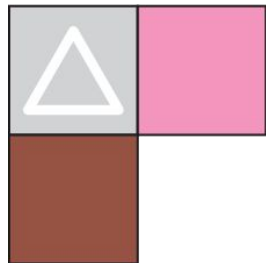
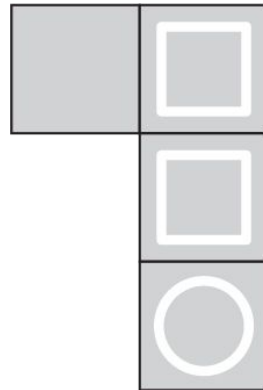
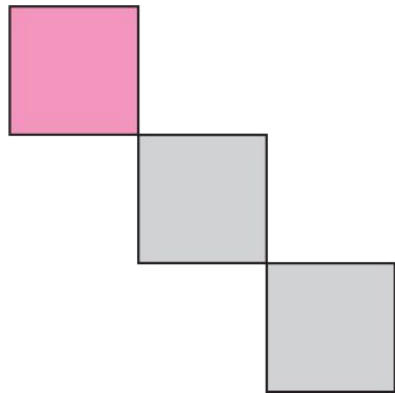


13



A Deluxe Box has 3 flavors - white, milk, and strawberry - and 3 shapes - triangles, circles, and squares.

Which of these clues could be used for this deluxe box?



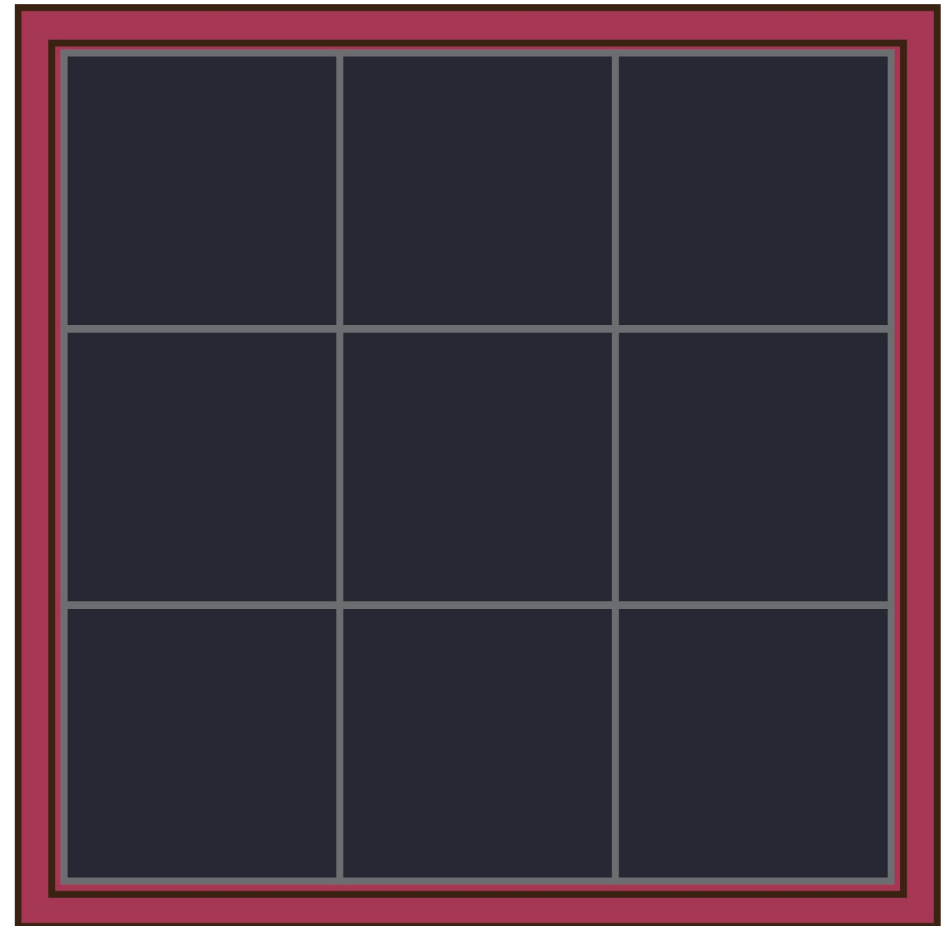
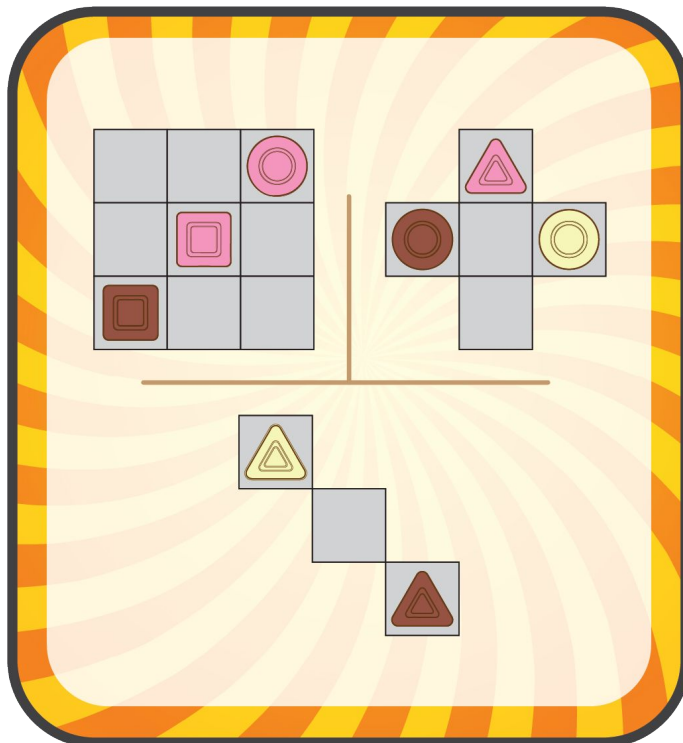
What other clues can you make for this box?



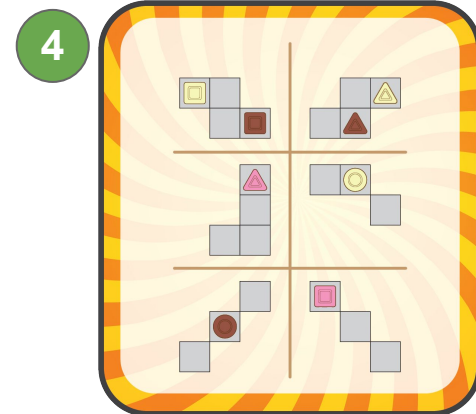
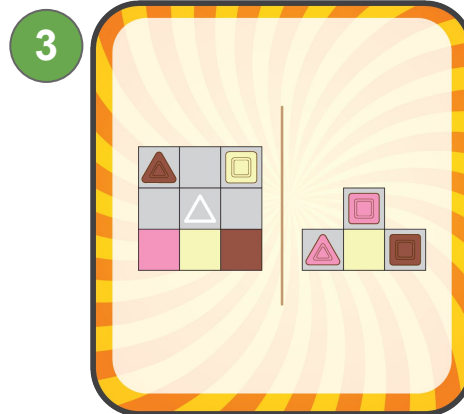
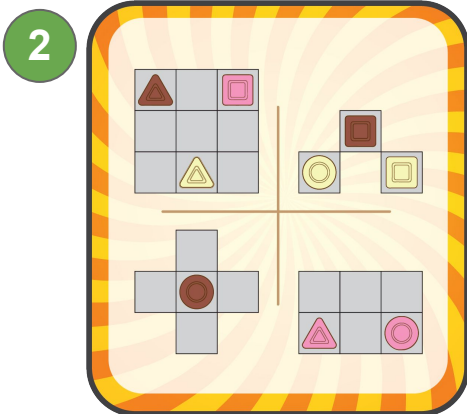
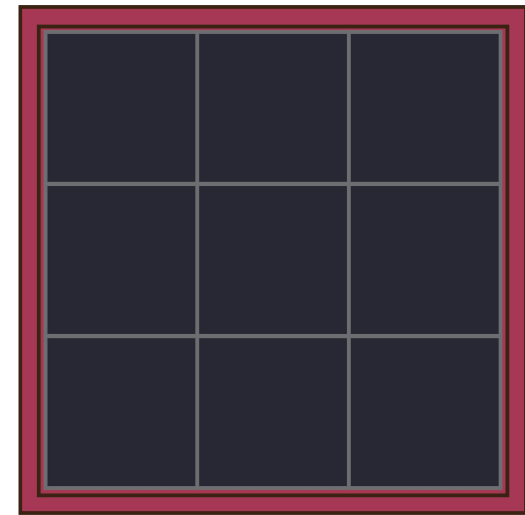
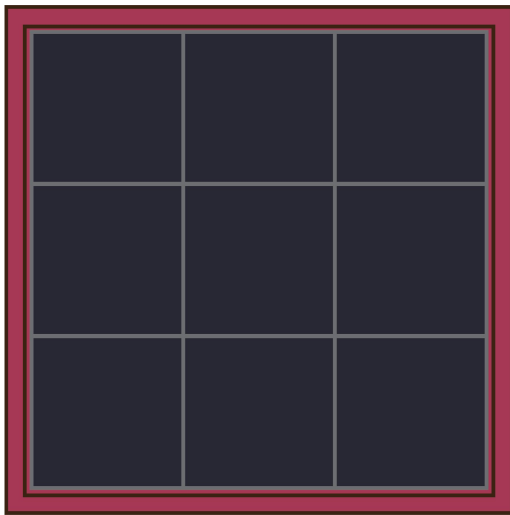
Use the clues below to fill the chocolate box.

Clues

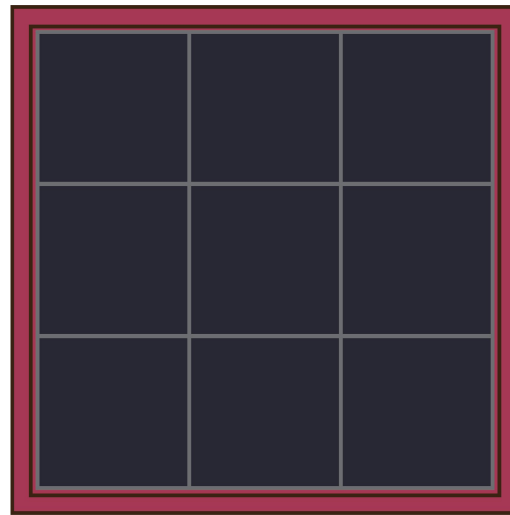
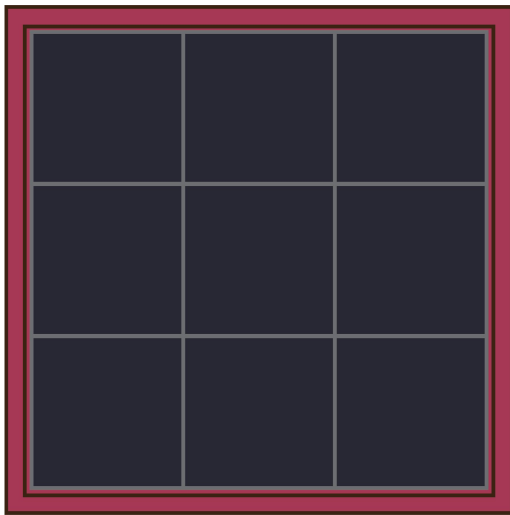
1



Using the clues below, can you fill each of the chocolate boxes? If so, how? If not, why not?



Using the clues below, can you fill each of the chocolate boxes? If so, how? If not, why not?



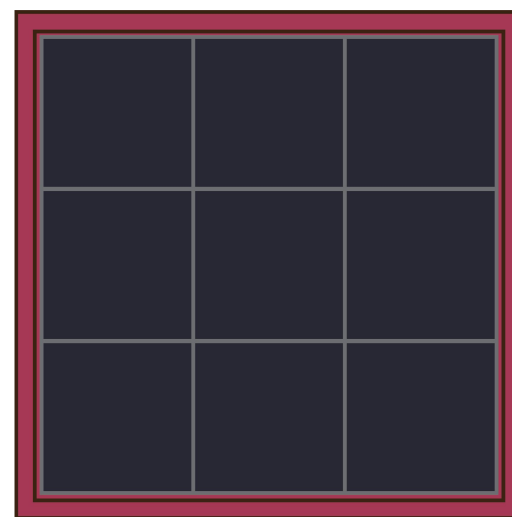
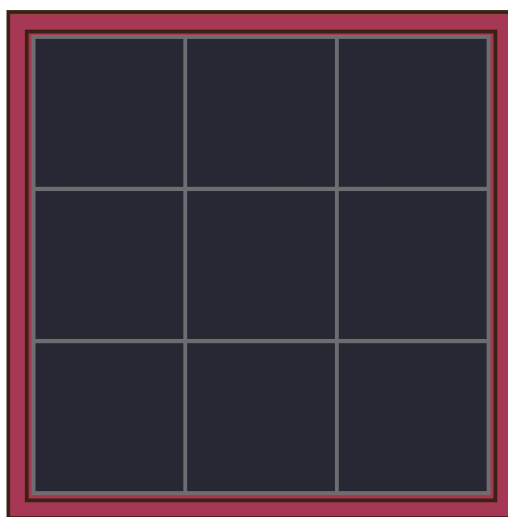
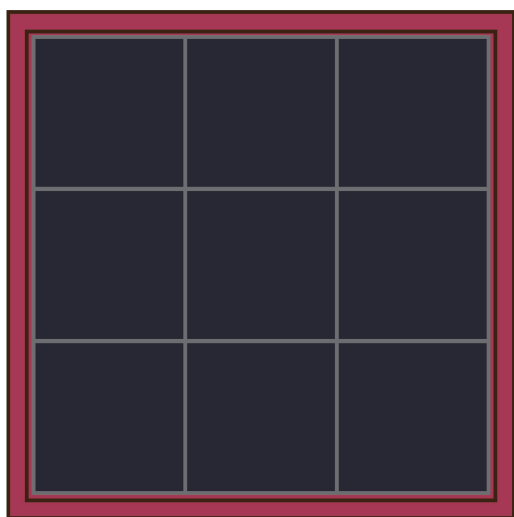
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6

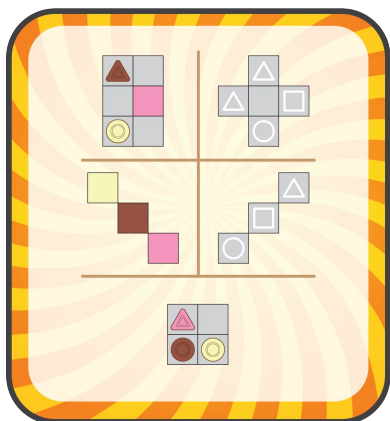
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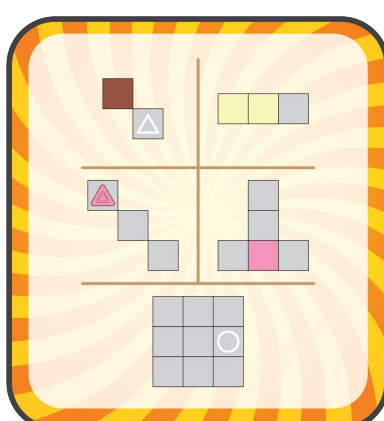
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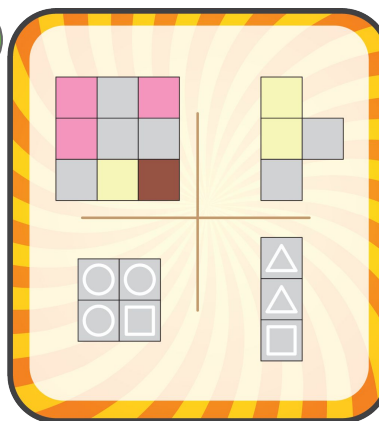
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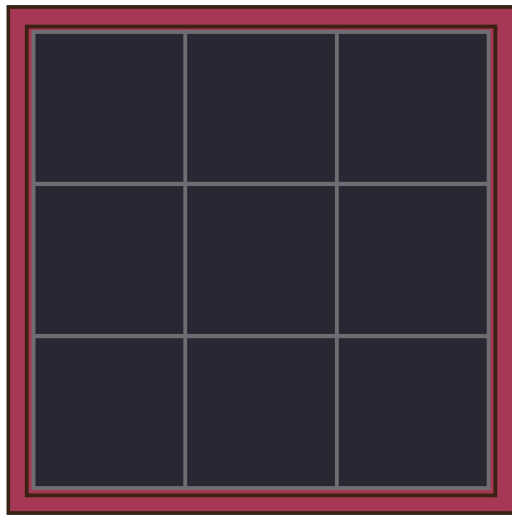
9



10



Using the clues below, can you fill each of the chocolate boxes? If so, how? If not, why not?



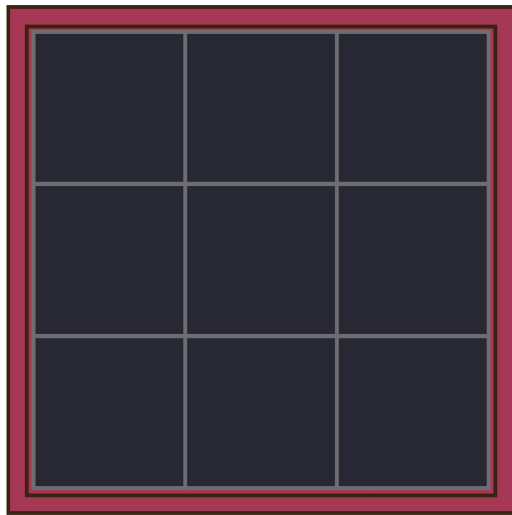
11

12

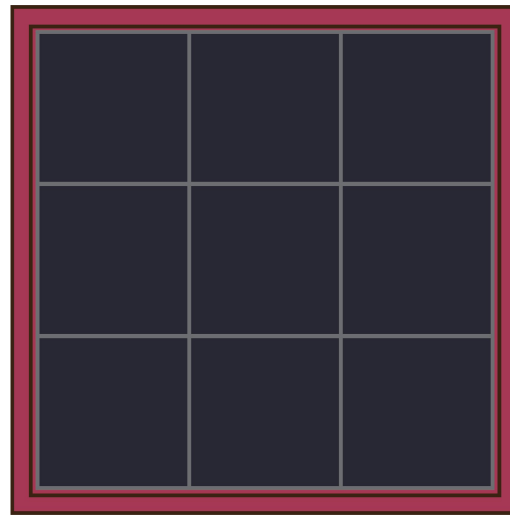
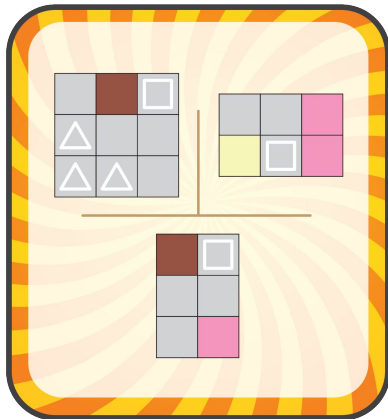
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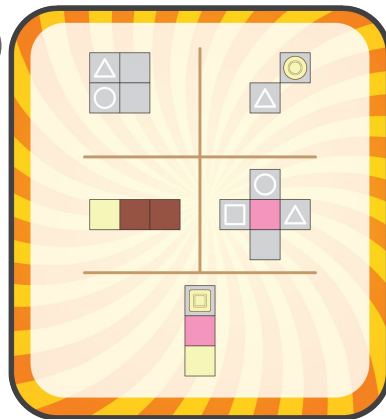
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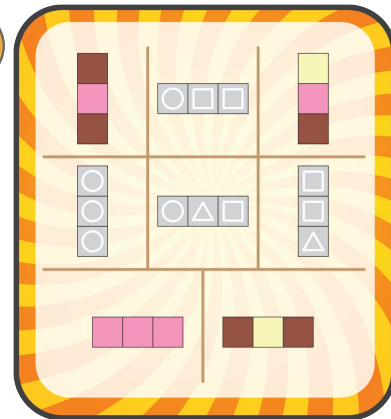
14



15



16



Choose 6 of the 7 clues below that you are going to use to fill your chocolate box. Depending on which 6 you choose, there might be only one way to fill your chocolate box, it might be impossible, or there might be more than one way to fill your chocolate box. Can you find an example for each of these three possibilities?

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