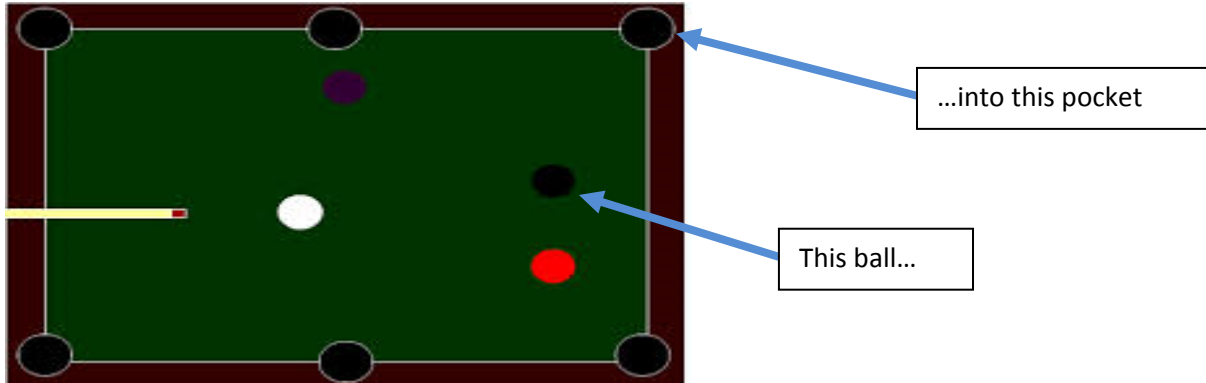


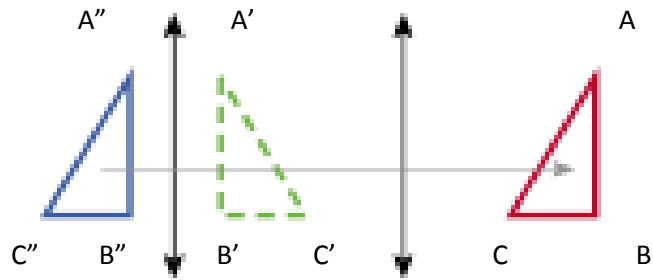
1. The diagram shows the top of a billiards (or pool) table. Starting with the white cue ball, construct a path that would result in the identified ball (the one with the arrow pointing to it) being hit into the upper right corner pocket.



2. Perform the indicated transformations to the given trapezoid.

<p>Reflection across the y-axis</p>	<p>Rotation 270° counter clock wise about the origin</p>
<p>Translation up 4 units and left 5</p>	<p>Reflection across the x-axis</p>

3. Triangle $A''B''C''$ is the composition of two reflections of triangle ABC across the two vertical lines. Using this transformation and the diagram below, answer the questions below.



i) How do the size and shape of triangle $A'B'C'$ compare with triangle ABC ?

ii) What type of transformation can take place to get $\Delta A'B'C'$ to ΔABC ?

iii) How do the fixed distances between the pre-images A , B , and C and images A'' , B'' , and C'' compare with the distances between the parallel lines?

iv) Assume that $BB'' = (4x - 12)$ inches and the distance between the parallel lines is 8 inches. What does x equal? Show your work.