
MATHCOUNTS®

2013

■ Chapter Competition ■

Target Round

Problems 7 and 8

Name _____

School _____

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TO DO SO.**

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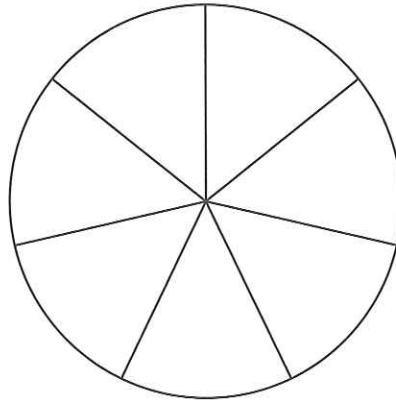
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02-C13TAR7

7. _____ ways A circular spinner has seven sections of equal size, each of which is colored either red or blue. Two colorings are considered the same if one can be rotated to yield the other. In how many ways can the spinner be colored?



8. _____ units² A square is inscribed in a circle of radius 5 units. In each of the four regions bounded by a side of the square and the smaller circular arc joining the endpoints of that side, a square is drawn so that one side lies on the side of the larger square and the two opposite vertices lie on the circle, as shown. What is the total area of the five squares? Express your answer to the nearest whole number.

