Key Concept and Vocabulary



Visual Model

If a figure has rotational symmetry, you can rotate it about a point and the figure will coincide with itself.



Skill Examples



Rotational symmetry $120^{\circ}, 240^{\circ}$

2.



Rotational symmetry 90° , 180° , 270°

Application Example

- **3.** Why are traditional playing cards made with rotational symmetry?
 - When you rotate a playing card 180°, you see the same picture.



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Check your answers at BigIdeasMath.com.

List the angles (less than 360°) that represent rotational symmetry.

4.



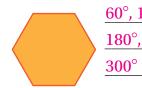


90°, 180°, 270°

6.

72°, 144°,

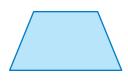
7.



60°, 120°, $180^{\circ}, 240^{\circ}$



 180° _ 9.



No rotational symmetry

10. AMBIGRAM A rotational ambigram is a word that has rotational symmetry. Which of the following ambigrams contain the same word when rotated?

(a) and (c)



"WOW Synmet