

Symmetry of Hub Caps

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[Images taken from Style-Line](#)



Cornell **C**enter for **M**aterials **R**esearch

What is Symmetry?

Line Symmetry

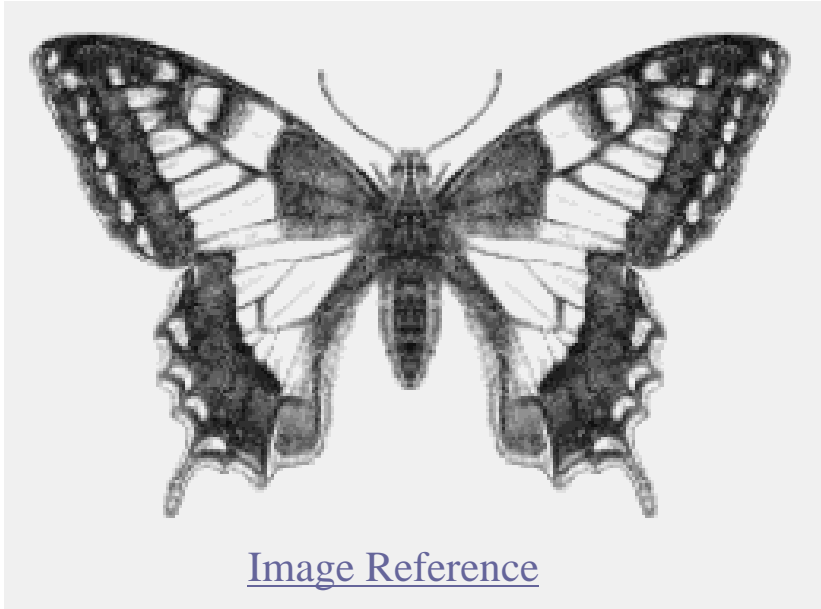


Image Reference

“A Shape has line symmetry when one half of it is the mirror image of the other half.”

Examples of Line Symmetry

Determining the Symmetry of Hub Caps

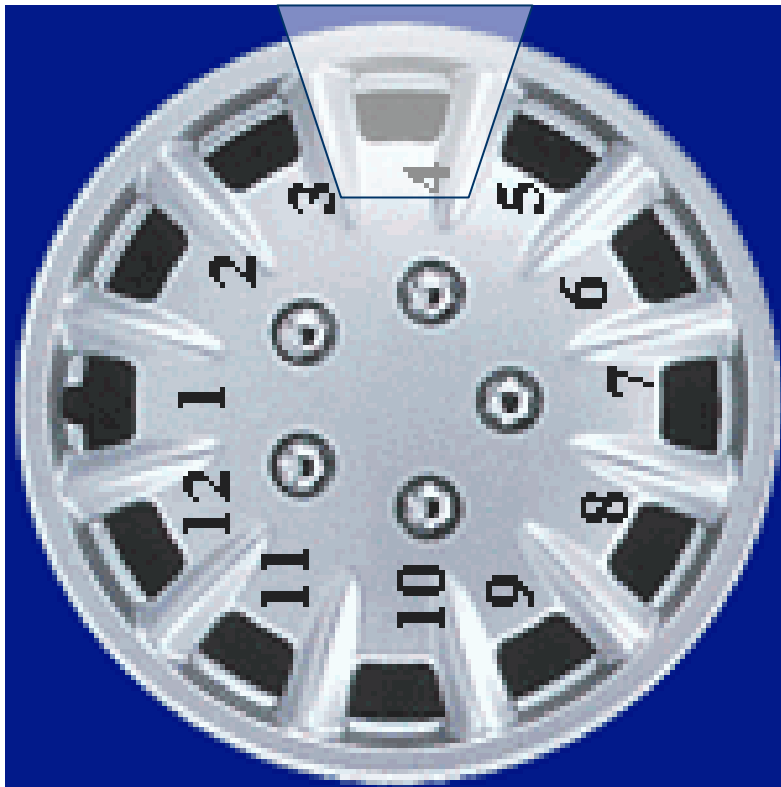


To determine the symmetry of a hub cap, count the number of spokes.

What is the rotational symmetry of this hub cap?

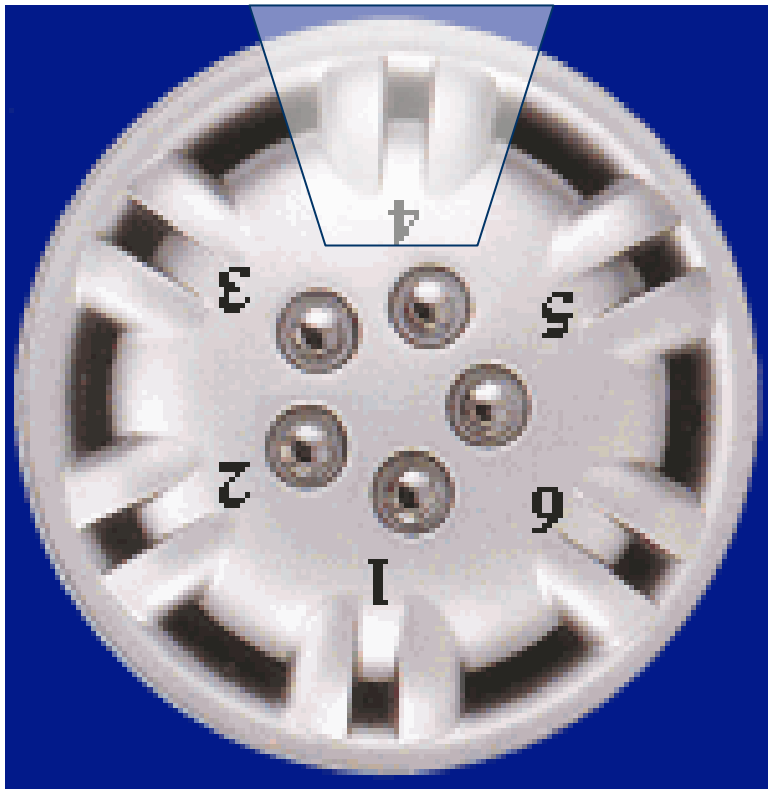
12, 6, 5, 10

What is the Rotational Symmetry?



- The numbers show the rotational symmetry by illustrating each replica spoke.
- Notice that it can be rotated 12 times keeping the same spoke formation.

What is the Rotational Symmetry?



How many times can this hub cap be rotated?

Try These Examples

Draw one of these and determine it's symmetry



Images taken from Style-Line

Symmetry Activity



Determine the rotational symmetry of these hub caps.