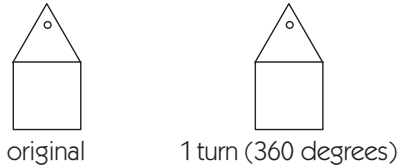


Session 8 Rotational Symmetry (cont.)

Sage No, Lilly, I get what you did on the overhead. I'm talking about something different, like this figure where there is no turn to get the figure to a different position except the start.



Lilly I think it would be order 0 because there is no new turn.

Rafael It could be order 1 because you could turn it all the way around.

Adam Order 1 makes sense to me because otherwise there would be no order 1.

Lilly What do you mean Adam?

Adam Put Sage's frame by your frame. Your frame is order 2. It is the smallest so far. But there were designs on the sheet that had order 3 and an order 4. Now if Sage's frame is order 0, there is no order 1. That doesn't make sense to me to skip from 0 to 2.

Lilly So order 1 would be 1 full turn, which is really the same as no turn at all!

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Note Mathematicians generally agree that since 360° counts in all the other orders of rotation, a figure that is duplicated only once—at a rotation of 360° —has a rotational order of 1. A figure is not considered rotationally symmetrical unless it has a rotational order of 2 or more.

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