

Which One Doesn't Belong?

This routine supports students in looking for and making use of structure (MP7). Students use their existing ideas and language to decide which of four mathematical objects is different from the others. All sets of objects are designed so that each of the objects “doesn't belong” in some way, which helps students focus on their reasoning and communication rather than their answer. This routine is adapted from the work of Christopher Danielson, Megan Franke, and Sesame Street (among others).

Facilitation

1. Present students with four figures, diagrams, graphs, or expressions with the prompt: *Which one doesn't belong?*
2. Give students one minute of time to think quietly. Ask them to indicate when they have noticed one letter that does not belong and can explain why. Encourage them to look for more than one possibility.
3. When the minute is up, give students two minutes to share their responses with their partner and work together to find at least one reason *each* representation doesn't belong.
4. Invite students to describe the ways each choice is different from the rest (e.g., The top left is the only one that _____).

Consider asking a student to share *why* they chose an object, but not *which* object they chose, and then ask the class to decide which object the student chose.