

ACTIVITY IA11.2: Line Up

Intended learning: To find halfway along a linear arrangement of discrete objects and to see that adding the same quantity to both ends doesn't change the halfway point.

Description: Invite a number of your students (say, three with young children or seven with older students) to line up at the front of the classroom and face the class. Ask your students if they can tell you which student is half way down the line, that is, who is in the middle of the line and how they know. Invite a student to demonstrate his or her method of determining who is in the middle of the line. Ask two more students to join the line, one on each end, and repeat the question of determining who is half way down the line. Invite a student to explain why the half way location doesn't change.

Variation: Have the two additional students face the opposite direction to the rest of the line of students. This will make it easier to focus on the change. First, add the two students to one end of the line and then compare this with having one go to each end.

Alternatively, have your students explain what happens when you have an even number of students in the line.