Making equal groups

Preparation

Each pair of students will need:

- 48 counters

Investigation

How many different ways can 48 be divided into equal groups?

Activity

Project slide 1 and read the investigation question. Organize students into pairs and have them work together to find and record all the different combinations (1×48, 2×24, 3×16, 4×12, 6×8, and their turnarounds). Allow them to use counters if necessary for additional support. As they are working, walk around and take note of their methods. Some students may take a systematic approach while others may be more random. Also note the different ways they record the data, for example use a table. Afterward, invite pairs to share different combinations and describe their methods. Ask questions such as, Where did you start? What did you do next? Why? Refer to two turnaround combinations and ask, How are these the same? How are they different?