*continued from previous page*

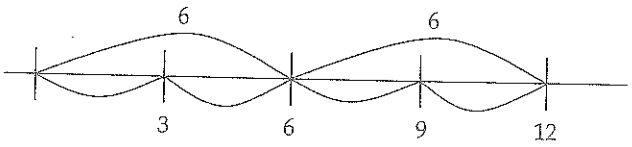
**Deena:** From the last problem. This one is double.

**Diana:** Oh, that's an interesting shortcut, isn't it? So the number line would be twice as long. *(Draws the number line with 4 jumps of 6, landing on 24.)* OK. Did anyone do it a different way? *(Some discussion about repeated addition shown on the number line occurs. Deena's strategy represents a way to look at 6 + 6 + 6 + 6.)* OK. Here's the next problem, 4 × 3.

**Pablo:** It's 12. I did 3 and 3, and that was 6, and then 9, 12 *(skip-counting)*.

**Samantha:** It's the same answer as 2 × 6.

**Diana:** Isn't that interesting! Let's put it on the same number line so we can figure out why that happened.




*Here the use of the double number line allows students to explore equivalent relations.*

# The Open Number Line · B14

## Doubling and Halving

As with B13, this minilesson highlights the doubling and halving strategy. The numbers keep the focus on automatizing the facts. Use a number line as a way to represent equivalence. Represent student strategies using leaps on the number line. Equivalent problems can be shown on the top and the bottom of the number line as shown in Inside One Classroom, above.

2 × 8

4 × 8

4 × 4

8 × 4

4 × 8

16 × 2

32 × 1

4 × 6

2 × 12

14 × 5