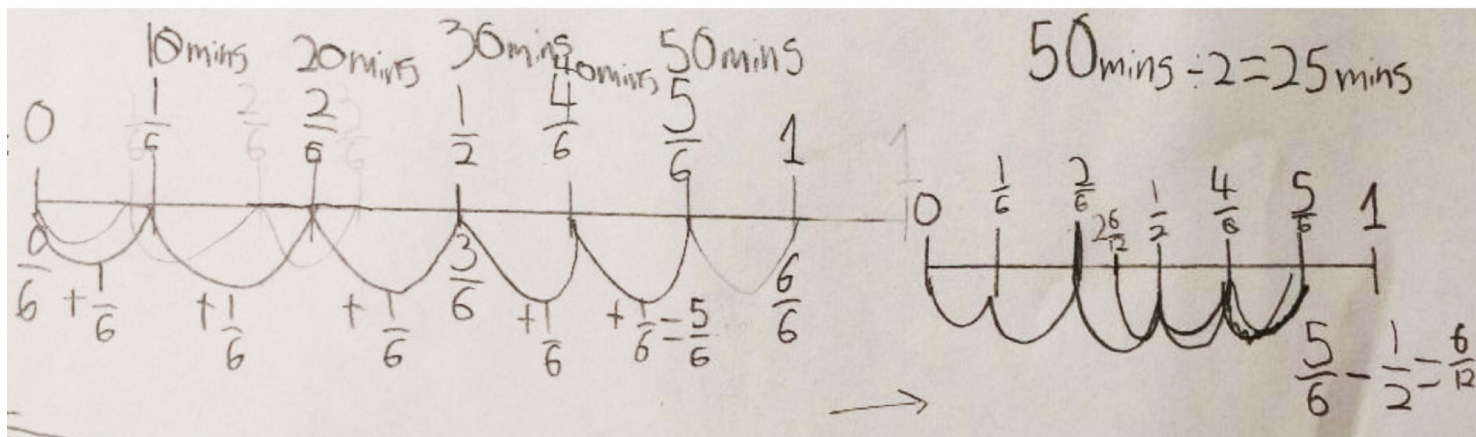


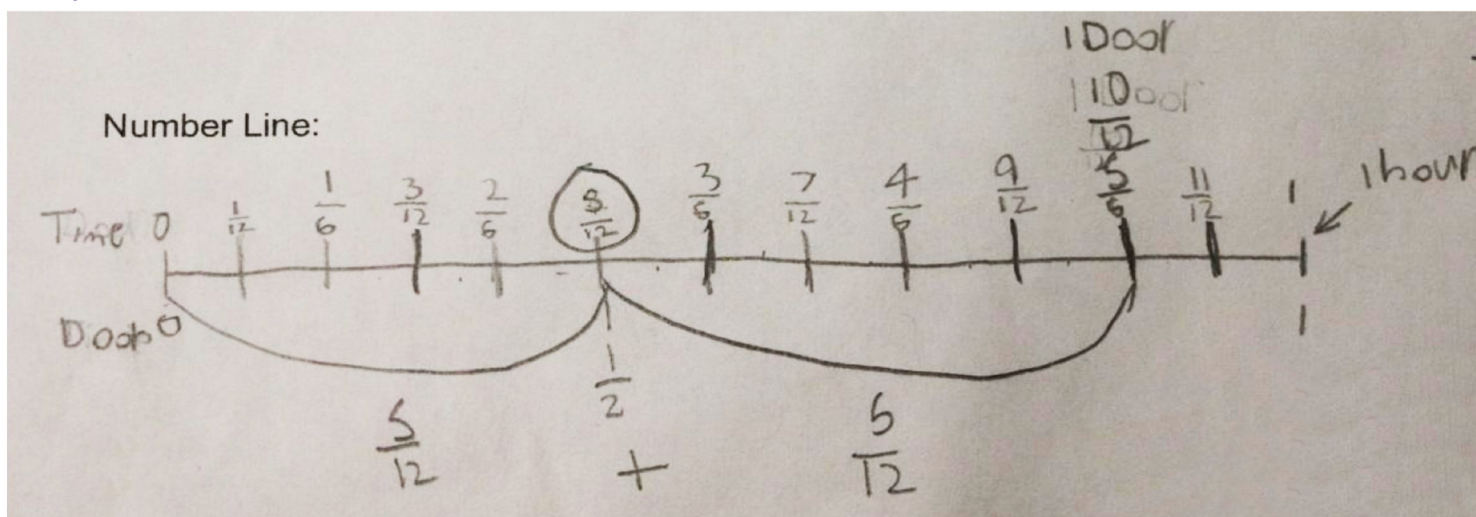
THE PAINTED DOOR

OPERATION N Divide a fraction by a like denominator fraction using models and symbols (e.g., $10/4$ divided by $3/4$)

Sample 1a



Sample 1b



Both pairs of students show repeated addition on a number line. Note that each used two different scales on the same number line (i.e., time is represented on top of the number line, with the fraction of the door on the bottom). The precision in labelling in sample 1b clearly communicates the students' understanding of the task. In sample 1a, the students create a second number line to demonstrate halving of the original number line. They also convert to minutes (50 minutes) and solve by dividing that number of minutes in half (25 minutes).

Sample 2

These students solve the task by setting up a proportion and solving it. They then represent their answer of 25 minutes on the clock. It would be interesting to know what about the question made the students think of it as a proportional task.

A good next step would be to encourage the student to label the unit fractions within the clock (e.g., twelfths).

