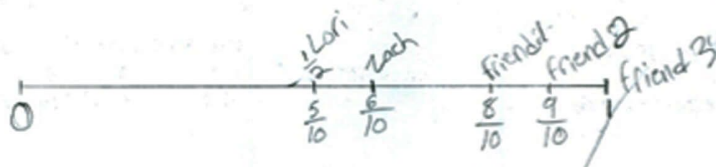# RELAY RACE
OPERATION D
Add and subtract fractions with friendly but unlike denominators (e.g., 2 and 10), using models and symbols

SAMPLE 1

$\frac{1}{2} = \frac{5}{10}$ $\frac{1}{10} = \frac{5}{10}$

Lori will run $\frac{5}{10}$, Zach will run $\frac{1}{10}$, and 3 friends will run $\frac{2}{10}$, $\frac{1}{10}$ and $\frac{1}{10}$.

This student converted one half to five tenths in order to work with a common fractional unit of tenths. The student used the number line, which is reasonably accurately scaled, to add as they determined how far each friend could run to fill in the whole distance. The student identified different distances for three friends to run, demonstrating some understanding of adding fractions by considering the numerator.

SAMPLE 2

Each friend will have to run $\frac{2}{10}$. If Lori runs $\frac{1}{2}$ and Zach runs $\frac{1}{10}$, that leaves $\frac{4}{10}$ for her friend to run. If she has 4 friends, they could each run $\frac{1}{10}$. If she only has 2, they could each run $\frac{2}{10}$. If she only has 1 other friend, they could run $\frac{4}{10}$.

This student constructed a reasonably accurately scaled number line which appears to have been used to determine that the final four tenths of the race will be completed by Lori's friend(s). This student has assumed that the friends will each run the same distance and considers the possibility of different numbers of friends.