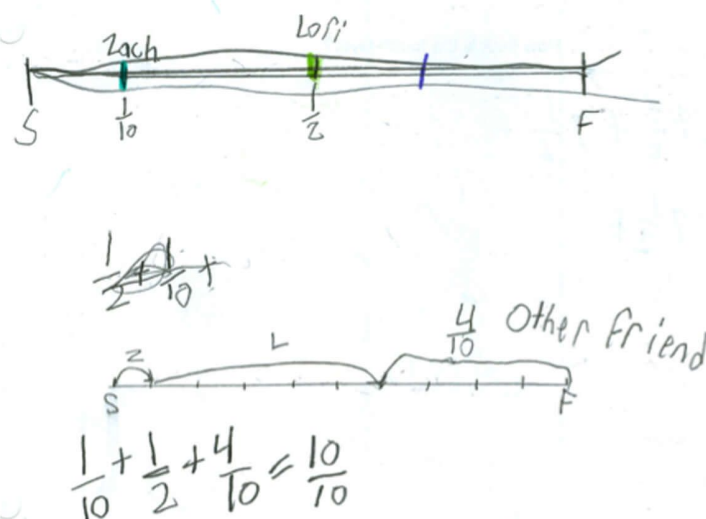


RELAY RACE

OPERATION D

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

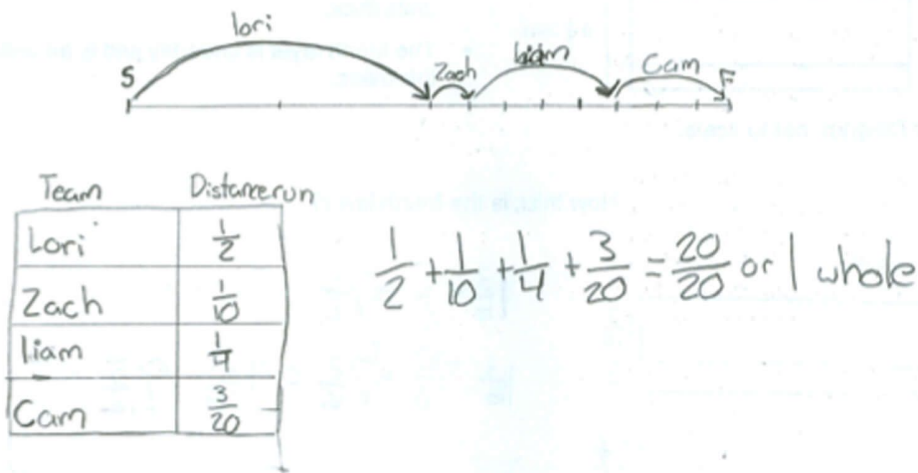
SAMPLE 5



This student uses a number line to first plot one tenth and one half and then uses a second number line to visually add the fractions on the number line, allowing them to determine that the remaining distance is four tenths. The student correctly assigns this distance to one friend. A possible next step would be to ask this student how they might share the distance amongst two additional friends to see if they are able to decompose four tenths further.

SAMPLE 6

This student seems quite comfortable using different denominators to represent the distances without showing the equivalent fractions in twentieths and generates a correct number sentence. The student may have arrived at twentieths by multiplying the denominators of one half (2) and one tenth (10). However, the number line is actually equally partitioned into sixteenths, not twentieths, so it is not obvious if the student actually understands the role and meaning of the different denominators.



Notice as well that the student has added a mark at the one fourth point, creating ten (non-equal) partitions. The distance marked for Zach is actually one sixteenth on the number line but may have been recorded as one tenth based upon a count of the non-equal partitions.

A discussion with this student could focus on the process used to determine the additional two fractions. It would be beneficial to have the student explain the connection between the number line and the number sentence.