a. Helen raised $12 for the food bank last year and she raised 6 times as much money this year. How much money did she raise this year?

b. Sandra raised $15 for the PTA and Nita raised $45. How many times as much money did Nita raise as compared to Sandra?

c. Nita raised $45 for the PTA, which was 3 times as much money as Sandra raised. How much money did Sandra raise?
Commentary:
These problems involve multiplicative comparison, which is not included in 3.OA.3 and is strictly excluded from 3.MD.2, making this a 4th rather than 3rd grade problem.

Solution: Tape diagram

a. She raised six times as much money (as shown in the diagram) so she raised $6 \times 12 = 72$.

Helen raised $72 this year.

b. $? \times 15 = 45$ is equivalent to $45 \div 15 = ?$

Nita raised 3 times as much as Sandra.

c. $3 \times ? = 45$ is equivalent to $45 \div 3 = ?$

Sandra raised $15.

Solution: Writing multiplication equations for division problems

a. Helen raised $6 \times $12 this year, so she raised $72 this year.

b. This is a “Number of Groups Unknown” problem. We can represent the question as

$$? \times 15 = 45$$

or

$$45 \div 15 = ?$$

So Nita raised 3 times as much money as Sandra.

c. This is a “Group Size Unknown” problem. We can represent the question as

$$3 \times ? = 45$$

or

$$45 \div 3 = ?$$

So Sandra raised $15.$