

ACTIVITY IA11.8: Recording Partitioning

Intended learning: To use drawings to record partitioning and distribution strategies.

Description: Ask the following questions involving sharing multiple continuous quantities. Figures 11.15–11.20 show student responses to each prompt.

I have 6 cups of milk. A recipe needs half of a cup of milk. How many times can I make the recipe before I run out of milk? Can you sketch your answer? (See Figure 11.15.)

Sketch what would happen if I have 6 cups of milk and a recipe needs three-quarters of a cup of milk. How many times can I make the recipe before I run out of milk? (See Figure 11.16.)

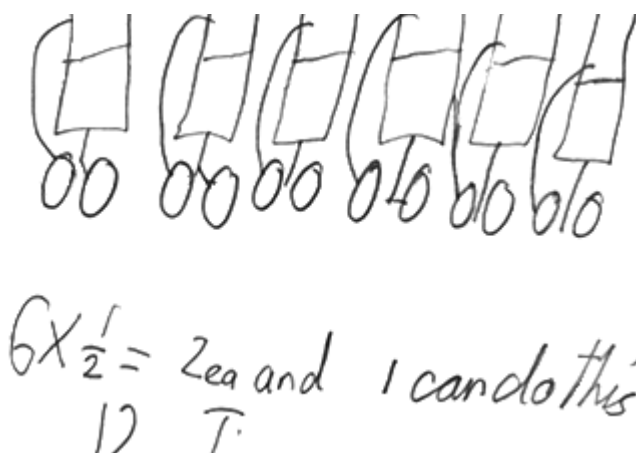


Figure 11.15 A response showing correct partitioning and developing notation

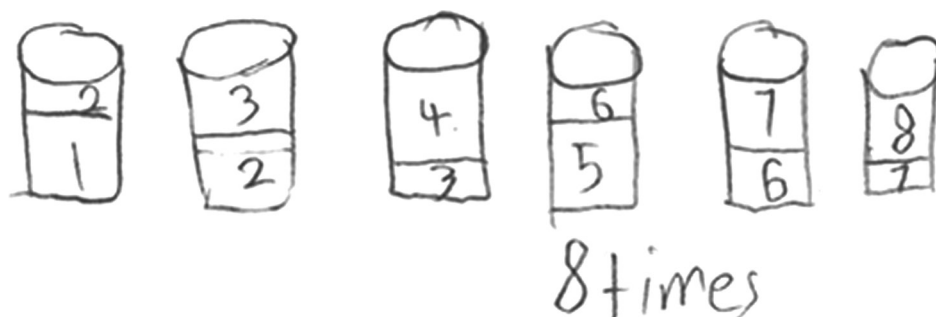


Figure 11.16 A response showing accumulated three-quarters

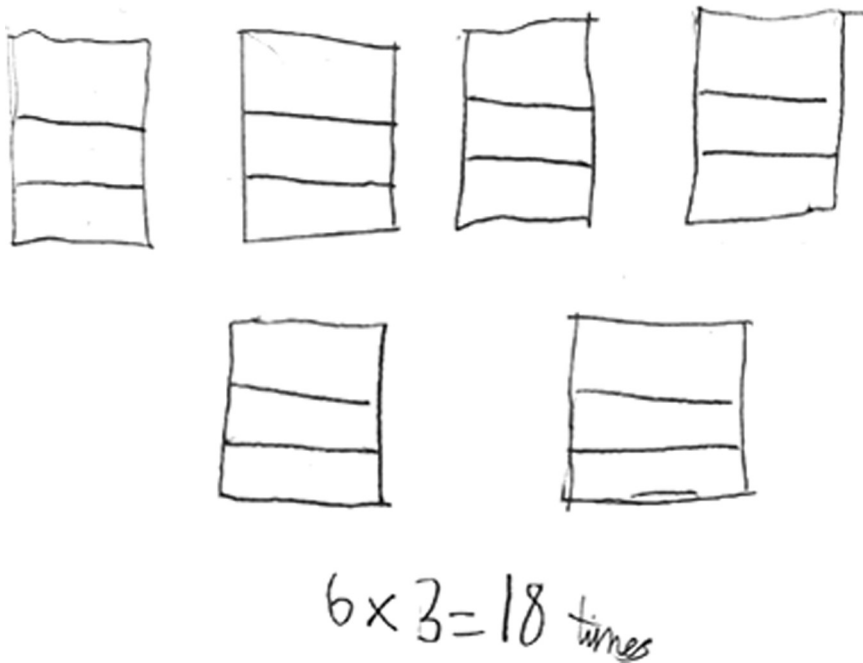


Figure 11.17 The multiplicative relationship between fractional parts and the whole

Sketch what would happen if I have 6 cups of milk and a recipe needs one-third of a cup of milk. How many times can I make the recipe before I run out of milk? (See Figure 11.17.)

How would you share 5 pancakes between 2 people? Can you sketch your answer? (See Figure 11.18.)

Sketch what would happen if you had to share 6 pancakes among 4 people. (See Figure 11.19 for a student response involving economical partitioning.)

Sketch what would happen if you had to share 9 pancakes among 12 people. (See Figure 11.20 for a student response involving partitioning in quarters.)