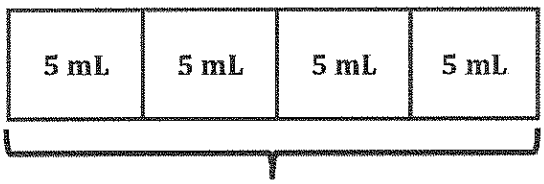
G3-M2-Lesson 9

1. Ben makes 4 batches of cookies for the bake sale. He uses 5 milliliters of vanilla for each batch. How many milliliters of vanilla does he use in all?



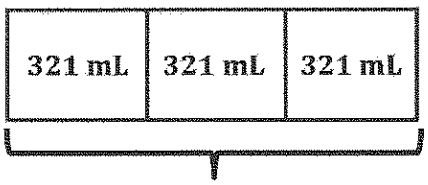
I can draw a tape diagram that has 4 units to represent the 4 batches of cookies. I can label each unit as 5 mL to represent the amount of vanilla used in each batch.

$4 \times 5 = 20$

I can multiply 4×5 to find the total amount of vanilla.

Ben uses 20 milliliters of vanilla.

2. Mrs. Gillette pours 3 glasses of juice for her children. Each glass holds 321 milliliters of juice. How much juice does Mrs. Gillette pour in all?



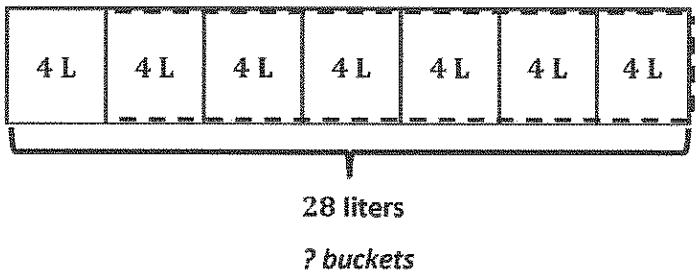
I can draw a tape diagram to model the problem. I can draw 3 units of 321 mL. I need to solve for the total amount of juice.

$321 + 321 + 321 = 963$

Mrs. Gillette pours 963 milliliters of juice.

I could solve using the expression, 3×321, but I don't know how to do that kind of multiplication yet. I can solve with repeated addition.

3. Gabby uses a 4-liter bucket to give her pony water. How many buckets of water will Gabby need in order to give her pony 28 liters of water?



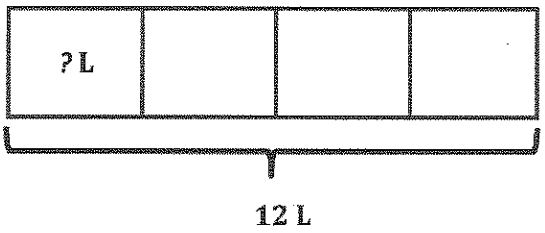
I can draw a tape diagram. I know the total is 28 liters and the size of each unit is 4 liters. I need to solve for the number of units (buckets).

$28 \div 4 = 7$

Gabby needs 7 buckets of water.

Since I know the total and the size of each unit, I can divide to solve.

4. Elijah makes 12 liters of punch for his birthday party. He pours the punch equally into 4 bowls. How many liters of punch are in each bowl?



I can draw a tape diagram. I know the total is 12 liters and there are 4 bowls or units. I need to solve for the number of liters in each bowl.

$12 \div 4 = 3$

Since I know the total and the number of units, I can divide to solve.

Elijah pours 3 liters of punch into each bowl.

I can divide to solve Problems 3 and 4, but the unknowns in each problem are different. In Problem 3, I solved for the number of groups/units. In Problem 4, I solved for the size of each group/unit.