G4-M3-Lesson 21

1. Yahya solved the following division problem by drawing an area model.

1 square unit

> I see 1 square unit. The whole is the sum of the areas of all 3 rectangles.
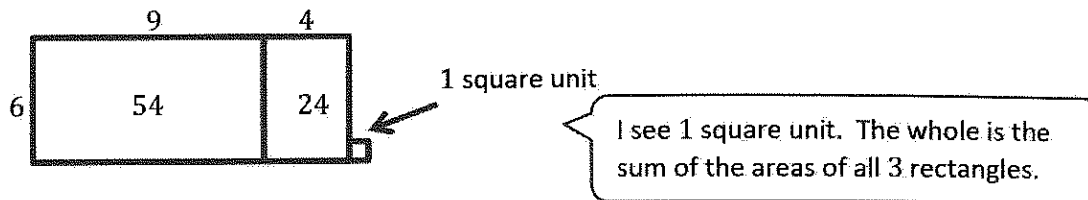
a. What division problem did he solve? $79 \div 6$

b. Show how Yahya's model can be represented using the distributive property.

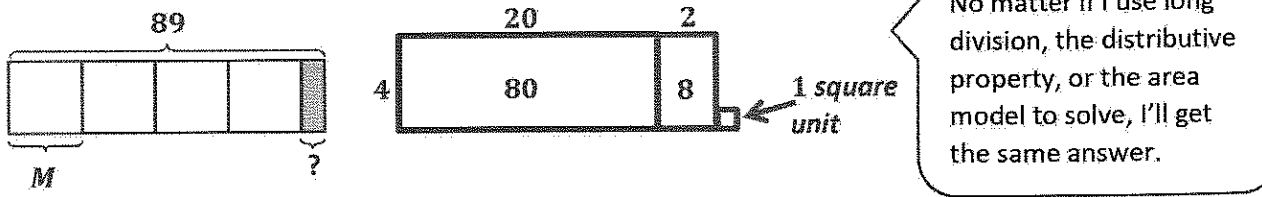$$(54 \div 6) + (24 \div 6)$$
$$= 9 + 4$$
$$= 13$$

> I remember to add a remainder of 1.

$$(6 \times 13) + 1 = 79$$

Solve the following problems using the area model. Support the area model with long division or the distributive property.

2. $71 \div 5$

$$(60 \div 5) + (10 \div 5)$$
$$= 12 + 2$$
$$= 14$$
$$(14 \times 5) + 1 = 71$$

3. $85 \div 6$

> The area of the smaller rectangle is the same as the number of distributed ones in the algorithm.

4. Eighty-nine marbles were placed equally in 4 bags. How many marbles were in each bag? How many marbles are left over?

1 square unit

> No matter if I use long division, the distributive property, or the area model to solve, I'll get the same answer.

There are 22 marbles in each bag. 1 marble is left over.

EUREKA MATH