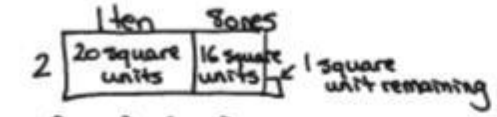
Name Jack Date _____

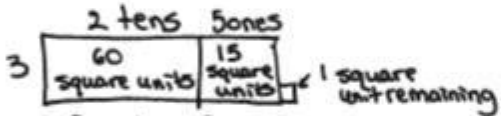
1. Solve 37 ÷ 2 using an area model. Use long division and the distributive property to record your work.



$(20 \div 2) + (16 \div 2)$
$= 10 + 8$
$= 18$
$(18 \times 2) + 1 = 37$

$$\begin{array}{r} 18\ R1 \\ 2\overline{)37} \\ -2 \\ \hline 17 \\ -16 \\ \hline 1 \end{array}$$

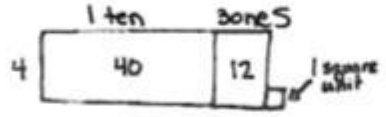
2. Solve 76 ÷ 3 using an area model. Use long division and the distributive property to record your work.



$(60 \div 3) + (15 \div 3)$
$= 20 + 5$
$= 25$
$(25 \times 3) + 1 = 76$

$$\begin{array}{r} 25\ R1 \\ 3\overline{)76} \\ -6 \\ \hline 16 \\ -15 \\ \hline 1 \end{array}$$

3. Carolina solved the following division problem by drawing an area model.



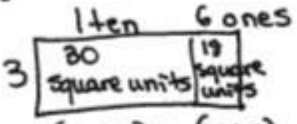
a. What division problem did she solve? $53 \div 4$

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

$(40 \div 4) + (12 \div 4)$
$= 10 + 3$
$= 13$
$(13 \times 4) + 1 = 53$

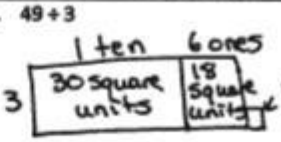
Solve the following problems using the area model. Support the area model with long division or the distributive property.

4. 48÷3



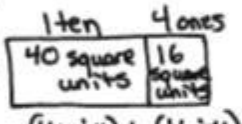
(30÷3) + (18÷3)
= 10 + 6
= 16

5. 49÷3



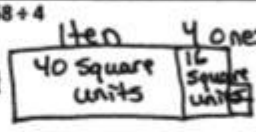
16 R1
3|49
-3
19
-18
1

6. 56÷4



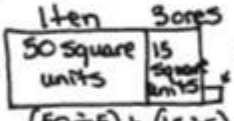
(40÷4) + (16÷4)
= 10 + 4
= 14

7. 58÷4



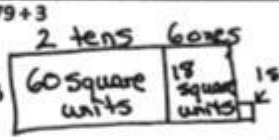
14 R2
4|58
-4
18
-16
2

8. 66÷5



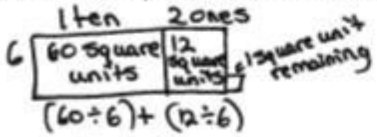
(50÷5) + (15÷5)
= 10 + 3
= 13
(13×5) + 1 = 66

9. 79÷3



26 R1
3|79
-6
19
-18
1

10. Seventy-three students are divided into groups of 6 students each. How many groups of 6 students are there? How many students will not be in a group of 6?



(60÷6) + (12÷6)
= 10 + 2
= 12
(12×6) + 1 = 73

12 R1
6|73
-6
13
-12
1

There are 12 groups of 6 students. 1 student will not be in a group of 6.