Name Date Time

LESSON 4•5

Division with Base-10 Blocks

For each problem:

- First use □ | . to represent the dividend with base-10 blocks.
- Then use □ | . to show how you would distribute the blocks in equal groups to represent the division.
- Record your answer with digits.

Example: 5)689 □□□□□□ ||||| ||| ::::.

□ ||| ::...	□ ||| ::...	□ ||| ::...	□ ||| ::...	□ ||| ::...	....

Answer: 137 R4
5)689

1. 3)427

- Show the dividend:
- Show equal groups below.

- Write the answer. 3)427

2. 4)555

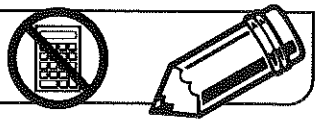
- Show the dividend:
- Show equal groups below.

- Write the answer. 4)555

Name Date Time

LESSON 4•5

A Division Challenge



Judy and two friends bought a raffle ticket at the school fund-raiser. They agreed that if they won, they would share the winnings equally. They won $145! They received one $100 bill, four $10 bills, and five $1 bills. Judy used this division algorithm to calculate how much money each person should get. Can you figure out how the algorithm works?

(*Hint:* There were 3 people in all. Judy realized that in order to share the $100 bill, they needed to trade it for ten $10 bills. Then they would have fourteen $10 bills and five $1 bills.)

	100s	10s	1s	10ths	100ths
		4	8	3	3
3	~~1~~	~~4~~	~~5~~	~~0~~	~~0~~
		14	25	10	10
		−12	−24	−9	−9
		~~2~~	~~1~~	~~1~~	1

1. Explain how you think the algorithm works. _____

_____

_____

_____

_____

_____

_____

_____

2. Explain what Judy did when she had $1 left. _____

_____

3. How much money did each person get? _____

4. Use the algorithm to divide: $4\overline{)51.6}$ _____