

Lesson Notes

2.4

NAME _____

Module 2 Whole Number Operations
Lesson 4 Large Numbers: Division

Lesson Objective

- Develop and use a variety of algorithms with computational fluency to perform whole number operations using division (up to two-digit divisor) and interpretation of remainders, including **real-world problems**.

Subtopics 1 and 2

Finding a Reasonable Quotient or Estimation and Partial Quotients Method for Division

Partial Quotients Method

- Find all the **partial** quotients.
- Add the **partial quotients** to get the final quotient.

$$3 \overline{)234}$$

$$3 \times \underline{80} = 240$$

$$3 \times \underline{70} = 210$$

So, the quotient is between 70 and 80

Solve using Partial Quotients.

- 1** Harrison drove 715 miles. His average speed was 55 miles per hour. How many hours was the trip?

13 hours

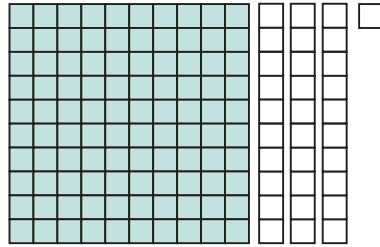
- 2** At the sports' banquet, 864 people are sitting at 72 tables. If the number of people at each table is the same, how many people are sitting at each table?

12 people

Subtopic 3

Division Using Base Ten Blocks

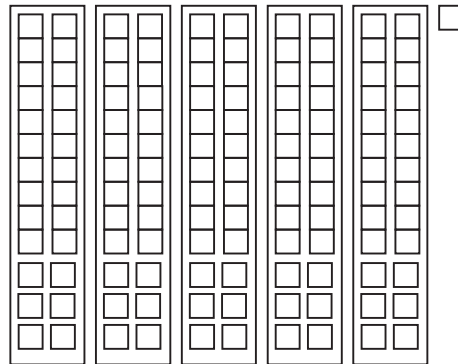
To divide 131 by 5, rearrange 1 hundreds-block, 3 tens-blocks, and 1 ones-block



into 5 equal groups of 26 with 1 ones-block left over.

$$\begin{array}{r} 26 \\ 5 \overline{)131} \\ \underline{100} \\ 31 \\ \underline{30} \\ 1 \end{array}$$

$$131 \div 5 = 26 \text{ R}1$$



Model.

$$4 \overline{)135}$$

$$33 \text{ R}3$$



Divide.

$$4 \overline{)127}$$

$$31 \text{ R}3$$

Subtopic 4

Interpreting Remainders

Interpreting Remainders

- Drop the remainder.
- Increase the quotient.
- Use the remainder as the answer or to get an answer.



Cate invites 188 people to her wedding reception. How many tables are needed if each table seats six people? **Increase the quotient, 32 tables**



There are 49 people trying out for a football team. The team will be divided into groups of 11 players each. The rest of the people will be on the practice squad. How many people will be on the practice squad? **Use the remainder, 5 people**