

### 3 Develop the Concept: Visual



## Visual Learning

### 2-Digit Quotients

How can you divide larger numbers?

So far, 467 tortillas have been made. These tortillas will be placed in packages of 15. How many complete packages will be filled?

**Choose an Operation** Divide to find the number of packages of tortillas.



What division sentence do you need to solve?  $[467 \div 15 = ?]$

#### Step 1

Estimate to help decide where to place the first digit in the quotient.

Use compatible numbers.

$$450 \div 15 = 30$$

Start dividing tens.

## 1 Visual Learning

**Set the Purpose** Call students' attention to the **Visual Learning Bridge** at the top of the page. *In this lesson, you will learn how to divide 3-digit numbers by 2-digit numbers when the quotient is a 2-digit number.*

## 2 Guided Practice



Formative Assessment

Remind students to use compatible numbers to help them estimate a reasonable answer. Have students use grid paper or lined notebook paper turned sideways to keep the digits aligned.

Exercise 6

### Error Intervention

**If** students have difficulty interpreting the question and deciding what to do with the remaining tortillas after dividing 627 by 15, **then** ask: *How many tortillas are in a filled package?* [15] *After filling packages, how many of the 627 tortillas are not in packages?* [12] *Do you have enough tortillas to fill another package?* [No] *How many packages have 15 tortillas in them?* [41]

**Reteaching** Model finding the quotient for  $853 \div 27$ . Begin by using compatible numbers to decide where to place the first digit. For another example and more practice, assign **Reteaching** Set E on p. 143.

## 3 Independent Practice

Remind students that estimating first will help them decide where to place the first digit in the quotient. Use Exercise 11 as an example. *You can estimate  $800 \div 80$  to know where to place the first digit in the quotient. The estimate is 10, so place a 1 in the tens place.*

### Lesson 5-6

## 2-Digit Quotients

How can you divide larger numbers?

So far, 467 tortillas have been made. These tortillas will be placed in packages of 15. How many complete packages will be filled?

**Choose an Operation** Divide to find the number of packages of tortillas.



**Understand It!** Estimation, multiplication, subtraction, and comparing are used to find quotients.

### Guided Practice\*

#### Do you know HOW?

Copy and complete.

$$\begin{array}{r} 20 \ 45 \\ 1. \ 47 \overline{)985} \phantom{0} \\ \underline{-94} \phantom{0} \\ 45 \end{array}$$

$$\begin{array}{r} 20 \ 18 \\ 2. \ 33 \overline{)678} \phantom{0} \\ \underline{-66} \phantom{0} \\ 18 \end{array}$$

For 3 and 4, divide.

$$\begin{array}{r} 16 \ 10 \\ 3. \ 16 \overline{)298} \\ \underline{-18} \phantom{0} \\ 18 \ 10 \end{array}$$

$$\begin{array}{r} 12 \ 16 \\ 4. \ 23 \overline{)292} \\ \underline{-12} \phantom{0} \\ 12 \ 16 \end{array}$$

#### Do you UNDERSTAND?

- Writing to Explain** In the problem above, why will 31 packages be filled instead of 32?  
**See margin.**
- How many packages will 627 tortillas fill?  
**41 packages**
- How do you decide where to place the first digit in the quotient for Exercises 1–4? **See margin.**

### Independent Practice

**Leveled Practice** Copy and complete.

$$\begin{array}{r} 16 \ 8 \\ 8. \ 36 \overline{)584} \phantom{0} \\ \underline{-36} \phantom{0} \\ 224 \\ \underline{-1} \phantom{0} \\ 2 \ 6 \end{array}$$

$$\begin{array}{r} 21 \ 36 \\ 9. \ 45 \overline{)981} \phantom{0} \\ \underline{-0} \phantom{0} \\ 9 \\ \underline{-1} \phantom{0} \\ 8 \\ \underline{-45} \phantom{0} \\ 36 \end{array}$$

$$\begin{array}{r} 12 \ 2 \\ 10. \ 56 \overline{)674} \phantom{0} \\ \underline{-56} \phantom{0} \\ 114 \\ \underline{-112} \phantom{0} \\ 2 \end{array}$$

In 11 through 22, divide.

$$\begin{array}{r} 11 \ 28 \\ 11. \ 76 \overline{)864} \\ \underline{-11} \phantom{0} \\ 12 \ 8 \end{array}$$

$$\begin{array}{r} 12 \ 3 \\ 12. \ 23 \overline{)279} \\ \underline{-12} \phantom{0} \\ 15 \ 3 \end{array}$$

$$\begin{array}{r} 11 \ 17 \\ 13. \ 63 \overline{)710} \\ \underline{-11} \phantom{0} \\ 17 \ 0 \end{array}$$

$$\begin{array}{r} 35 \ 8 \\ 14. \ 18 \overline{)638} \\ \underline{-35} \phantom{0} \\ 18 \ 8 \end{array}$$

$$\begin{array}{r} 12 \ 6 \\ 15. \ 48 \overline{)582} \\ \underline{-12} \phantom{0} \\ 26 \ 2 \end{array}$$

$$\begin{array}{r} 30 \ 4 \\ 16. \ 26 \overline{)784} \\ \underline{-30} \phantom{0} \\ 8 \ 4 \end{array}$$

$$\begin{array}{r} 76 \ 1 \\ 17. \ 13 \overline{)989} \\ \underline{-76} \phantom{0} \\ 22 \ 9 \end{array}$$

$$\begin{array}{r} 35 \ 12 \\ 18. \ 72 \overline{)2,532} \\ \underline{-35} \phantom{0} \\ 12 \ 2 \end{array}$$

$$\begin{array}{r} 46 \ 50 \\ 19. \ 4,328 \div 93 \\ \phantom{00} 46 \ 50 \end{array}$$

$$\begin{array}{r} 25 \ 3 \\ 20. \ 678 \div 27 \\ \phantom{00} 25 \ 3 \end{array}$$

$$\begin{array}{r} 21 \ 35 \\ 21. \ 980 \div 45 \\ \phantom{00} 21 \ 35 \end{array}$$

$$\begin{array}{r} 23 \ 84 \\ 22. \ 717 \div 31 \\ \phantom{00} 23 \ 84 \end{array}$$

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\*For another example, see Set E on page 143.

5. There is a remainder of 2 tortillas that do not make a complete package.

7. Use estimation with compatible numbers to help you decide.