

Name \_\_\_\_\_

## Divide by 2-Digit Divisors

**I Can** divide by 2-digit divisors.**UNLOCK the Problem**

Mr. Yates owns a smoothie shop. To mix a batch of his famous orange smoothies, he uses 18 ounces of freshly squeezed orange juice. Each day he squeezes 560 ounces of fresh orange juice. How many batches of orange smoothies can Mr. Yates make in a day?

Divide.  $560 \div 18$  Estimate. \_\_\_\_\_**STEP 1** Use the estimate to place the first digit in the quotient.
$$\begin{array}{r} 18 \overline{)560} \end{array}$$

The first digit of the quotient will be in the \_\_\_\_\_ place.

**STEP 2** Divide the tens.
$$\begin{array}{r} 3 \\ 18 \overline{)560} \\ \underline{-54} \phantom{0} \\ 20 \phantom{0} \\ \underline{-18} \phantom{0} \\ 2 \phantom{0} \end{array}$$

Divide.  $56 \text{ tens} \div 18$

Multiply. \_\_\_\_\_

Subtract. \_\_\_\_\_

Check. 2 tens cannot be shared among 18 groups without regrouping.

**STEP 3** Divide the ones. Write the remainder as a fraction.
$$\begin{array}{r} 31 \frac{2}{18} \\ 18 \overline{)560} \\ \underline{-54} \phantom{0} \\ 20 \phantom{0} \\ \underline{-18} \phantom{0} \\ 2 \phantom{0} \end{array}$$

Divide. \_\_\_\_\_

Multiply. \_\_\_\_\_

Subtract. \_\_\_\_\_

Check. \_\_\_\_\_

Since 31 is close to the estimate of 30, the answer is reasonable.  
So, Mr. Yates can make 31 batches of orange smoothies each day.

**Math Talk**

**MTR 7.1** Apply mathematics to real-world contexts.

Describe what the remainder 2 represents.



## Florida's B.E.S.T.

- Number Sense & Operations 5.NSO.2.2
- Algebraic Reasoning 5.AR.2.3
- Mathematical Thinking & Reasoning MTR.5.1, MTR.6.1, MTR.7.1

## Example

Every Wednesday, Mr. Yates orders fruit. He has set aside \$1,250 to purchase Valencia oranges. Each box of Valencia oranges costs \$41. How many boxes of Valencia oranges can Mr. Yates purchase?

You can use multiplication to check your answer.

Divide.  $1,250 \div 41$ 

DIVIDE

Estimate. \_\_\_\_\_

$$\begin{array}{r} 30 \phantom{0} \overline{41} \\ 41 \overline{)1,250} \\ \underline{-123} \phantom{0} \\ 20 \phantom{0} \\ \underline{-20} \phantom{0} \\ 0 \phantom{0} \end{array}$$

CHECK YOUR WORK

$$\begin{array}{r} 30 \\ \times 41 \\ \hline 30 \\ + 1,200 \\ \hline 1,250 \checkmark \end{array}$$

So, Mr. Yates can buy \_\_\_\_\_ boxes of Valencia oranges.

**Try This!** Divide. Write your remainder as a fraction. Check your answer.**A**

$$63 \overline{)756}$$

**B**

$$22 \overline{)46,921}$$