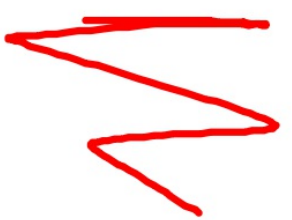


Q215

$$\begin{array}{r} \text{division} \quad \text{---} \quad \text{---} \quad \text{---} \quad \text{---} \quad \text{---} \\ 80 \overline{) 240} \\ \underline{240} \\ 0 \end{array}$$

← quotient
← dividend

② $200 \div 60 = 3 \quad R20$



p. 216

$$\begin{array}{r} 96 \\ 8 \overline{) 768} \\ \underline{- 72} \\ 48 \\ \underline{- 48} \\ 0 \end{array}$$

$$\begin{array}{r} 5 \\ 16 \overline{) 318} \\ \underline{- 16} \downarrow \\ 158 \\ \underline{- 144} \\ 14 \end{array}$$

③

$$\begin{array}{r} 411R5 \\ 39 \overline{) 7814} \\ \underline{-762} \\ 21 \\ \underline{-19} \\ 24 \\ \underline{-19} \\ 5 \end{array}$$

4

6

estimate:

$$3600 \div 40 = 90$$

$$\begin{array}{r} 94 \text{ R } 33 \\ 37 \overline{) 3454} \\ \underline{- 333} \\ 181 \\ \underline{- 148} \\ 33 \end{array}$$



Example



5. The total number of seats in a college stadium is 54,912. There are 44 sections and each section has an equal number of seats. How many seats are in each section?

Divide 54,912 by 44.

$$\begin{array}{r} 1,248 \\ 44 \overline{) 54,912} \\ \underline{-44} \\ 109 \\ \underline{-88} \\ 211 \\ \underline{-176} \\ 352 \\ \underline{-352} \\ 0 \end{array}$$

Divide each place-value position from left to right.

There are 1,248 seats in each section.

Guided Practice



Find each quotient. (Examples 1-4)

1. $8 \overline{) 736}$ ⁹²



2. $11 \overline{) 620}$ ^{56 R4}

3. $19 \overline{) 7,814}$ ^{411 R5}

4. $37 \overline{) 3,511}$ ^{94 R33}

5. Zach bought two new jet skis for \$15,480. He will make 36 equal payments. How much will each payment be?

(Example 5) **\$430**

6. **e** **Building on the Essential Question** How is estimation helpful when dividing multi-digit numbers?
Sample answer: Estimation can help to determine the reasonableness of answers when dividing multi-digit numbers.

Rate Yourself

How well do you understand dividing multi-digit numbers? Circle the image that applies.



Clear



Somewhat Clear



Not So Clear

For more help, go online to access a Personal Tutor.



Independent Practice

Go online for Step-by-Step Solutions



Find each quotient. (Examples 1-3)

1. $174 \div 6 =$
29

Show your work

2. $453 \div 8 =$
56 R5

3. $645 \div 43 =$
15

4. $299 \div 21 =$
14 R5

5. $62 \overline{)8,090}$
130 R30

6. $31 \overline{)2,480}$
80

7. $34 \overline{)5,780}$
170

8. $16 \overline{)3,482}$
217 R10

9. A tour bus travels 2,160 miles in 36 hours. What is the average distance the bus travels in one hour? (Example 4)
60 mi

Show your work

10. A charity sold 475 tickets to a dinner auction. If the charity raised \$16,625 in ticket sales, what was the cost of one ticket? (Example 5)
\$35

11. A city phone book has 86 pages filled with residents' names. There are a total of 15,050 names in the book. Each page has an equal number of names on it. How many names are on each page? (Example 5)
175 names

12. **Use Math Tools** The table shows the number of servings for different size cakes at Mimi's Bakery. Suppose a high school graduation expected 2,889 guests. How many X-large sheet cakes should the school order? Explain how you solved.
25 cakes; $2,889 \div 120 = 24$ R9.
9 guests would not have a piece of cake. So, another sheet cake needs to be ordered.

Mimi's Bakery	
Sheet Cake Size	Number of Servings
Small	30
Medium	60
Large	90
X-Large	120

13. **CCSS Be Precise** How many 8-ounce cups can be filled from 9 gallons of juice? (Hint: There are 128 ounces in one gallon.)
144 cups

14. **CCSS Be Precise** Water stations will be placed every 600 meters of a fifteen kilometer race. How many water stations will be needed? (Hint: There are 1,000 meters in one kilometer.)
25 stations

H.O.T. Problems Higher Order Thinking

15. **CCSS Model with Mathematics** Write and solve a real-world problem that involves a two-digit divisor and a four-digit dividend. **Sample answer: Mary saved \$2,400 in 12 months. What was the average amount she saved each month?: \$200**

16. **CCSS Persevere with Problems** If the divisor is 40, what is the least three-digit dividend that would give a remainder of 4? **124**

17. **CCSS Justify Conclusions** Can the remainder in a division problem ever equal the divisor? Why or why not? **No; Sample answer: if the remainder equals the divisor, then the quotient should be increased by 1.**

18. **CCSS Reason Abstractly** Use the digits 2, 4, and 8 one time each in the following problem.

$$\boxed{2} \boxed{4} 00 \div \boxed{8} 0 = 30$$

$$2,400 \div 80 = 30$$

19. **CCSS Reason Inductively** The table shows the mileage Karla drove on her trip. She drove for a total of 24 hours. Explain how to find her average speed. Then find the average speed.

Sample answer: Find the sum of the distances that she drove each day and divide the total by the number of hours; 60 mph

Day	Miles
1	400
2	118
3	82