



What is an estimate for the number of packages? [30]

Step 2

Divide the tens. Multiply and subtract. Continue the process.

$$\begin{array}{r} 31 \text{ R}2 \\ 15 \overline{)467} \\ \underline{-45} \\ 17 \\ \underline{-15} \\ 2 \end{array}$$

How many packages are full so far? [31] How many tortillas are left over? [2] 2 is the remainder. What do you do about the remainder in this case? [Ignore it because the question asks how many packages are complete. There are 2 extra tortillas, but they don't make a complete package.]

Step 3

Check:

$$\begin{array}{r} 31 \\ \times 15 \\ \hline 155 \\ + 310 \\ \hline 465 \end{array}$$

$465 + 2 = 467$
So far, 31 packages of tortillas will be filled.

How many more tortillas would they need to make to fill 32 packages? [13 more tortillas or 480 tortillas]

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.

Step 2

Divide the tens. Multiply and subtract. Continue the process.

$$\begin{array}{r} 31 \text{ R}2 \\ 15 \overline{)467} \\ \underline{-45} \\ 17 \\ \underline{-15} \\ 2 \end{array}$$

Step 3

Check:

$$\begin{array}{r} 31 \\ \times 15 \\ \hline 155 \\ + 310 \\ \hline 465 \end{array}$$

$$465 + 2 = 467$$

So far, 31 packages of tortillas will be filled.

Problem Solving

Exercise	Content
23	Communicate Math Understanding Estimation
24	Multiple Step [$\$10 - (\$3.50 + \$1.75 + \$0.42)$]
25	Division ($972 \div 12$)
26	Extra Information Multiple Step [$40 - (8 + 12 + 7)$]
27	Multiple Step [$(120 \div 2) \times 15$]
28	Compatible Numbers
29	Division ($540 \div 45$)
30	Number Sense Compare
31	Addition ($\$5 + \$11 + \$6 + \17)

Students use underlying processes and mathematical tools for Exercises 23–31. Remind students to check for reasonableness when solving each problem.

Exercise 25

Test-Taking Tip: Make a Plan Encourage students to think about problem-solving skills and strategies. *Remember that you should think about what is being divided. Are you dividing the total seats by number of concerts or the number of concerts by the total seats?* [Total seats by number of concerts: $972 \div 12 = 81$]

Early Finishers Refer to the information in Exercise 25. *The outdoor concert company is charging \$15.00 a ticket. How much money will it make for the concert series if all the seats sell out for all 12 concerts?* [$\$14,580$]

Problem Solving

23. **Writing to Explain** If you are asked to find $621 \div 59$, how do you know the quotient will be greater than 10 before you actually divide? *I know that $59 \times 10 = 590$ is less than 621.*

25. An outdoor concert company is putting on 12 concerts this summer. Each concert is sold out. The company sold a total of 972 seats. How many people will attend each performance?

- A 8 C 80
B 79 D 81

27. There are 120 minutes in 2 hours. How many minutes are there in 15 hours?
900 minutes

29. One of the Thorny Devil lizard's favorite foods is ants. It can eat up to 45 ants per minute. How long would it take it to eat 540 ants?

- A 9 minutes
B 10 minutes
C 12 minutes
D 15 minutes



24. Julita bought a sandwich for \$3.50 and a glass of juice for \$1.75. The tax was \$0.42. She paid with a \$10 bill. How much change did she get?
\$4.33

26. Julio spends about $\frac{1}{2}$ hour reading every night. He owns 8 science fiction books, 12 mystery books, and 7 history books. He wants to add enough books to his collection to have 40 books. How many more books does he need?
13 more books

28. What compatible numbers can you use to estimate $803 \div 86$?
810 and 90 or 800 and 80

30. **Number Sense** Decide if each statement is true or false. Explain.

- a $710 \div 20$ is greater than 30.
True; $20 \times 30 < 710$
b $821 \div 40$ is less than 20.
False; $20 \times 40 < 821$
c $300 \div 15$ is exactly 20.
True; $20 \times 15 = 300$

31. Braedy had \$5.00 when she left the county fair. She spent \$11.00 on her ticket, and she bought lunch for \$6.00. After lunch, she spent \$17.00 on games and rides. How much money did Braedy bring to the county fair?
\$39.00