

Additional Practice 5-4

Use Partial Quotients to Divide

Another Look!

A baker made 312 bagels in one day. If he puts 12 bagels in each package, how many packages did he make that day?

$$\begin{array}{r}
 6 \\
 20 \\
 12 \overline{)312} \\
 \underline{-240} \quad 20 \text{ groups of } 12 = 240 \\
 72 \\
 \underline{-72} \quad 6 \text{ groups of } 12 = 72 \\
 0 \quad 0 \text{ left over}
 \end{array}$$

Add the partial quotients: $20 + 6 = 26$.

So, the baker made 26 packages of bagels.

You can use multiplication to check your answer.



Leveled Practice In 1–13, use partial quotients to divide. Show your work.

1.
$$\begin{array}{r}
 4 \\
 30 \\
 21 \overline{)714} \\
 \underline{-630} \quad 30 \text{ groups of } 21 = 630 \\
 84 \\
 \underline{-84} \quad 4 \text{ groups of } 21 = 84 \\
 0 \quad 0 \text{ left over}
 \end{array}$$

Add the partial quotients: $30 + 4 = 34$.

So, $714 \div 21 = 34$.

Student work will vary.

2.
$$\begin{array}{r}
 41 \overline{)533} \\
 13
 \end{array}$$

3.
$$\begin{array}{r}
 15 \overline{)344} \\
 22 \text{ R } 14
 \end{array}$$

4.
$$\begin{array}{r}
 39 \overline{)780} \\
 20
 \end{array}$$

5.
$$\begin{array}{r}
 50 \overline{)700} \\
 14
 \end{array}$$

6.
$$\begin{array}{r}
 11 \overline{)801} \\
 72 \text{ R } 9
 \end{array}$$

7.
$$\begin{array}{r}
 24 \overline{)648} \\
 27
 \end{array}$$

8.
$$\begin{array}{r}
 33 \overline{)396} \\
 12
 \end{array}$$

9.
$$\begin{array}{r}
 17 \overline{)763} \\
 44 \text{ R } 15
 \end{array}$$

10.
$$\begin{array}{r}
 23 \overline{)920} \\
 40
 \end{array}$$

11.
$$\begin{array}{r}
 30 \overline{)810} \\
 27
 \end{array}$$

12.
$$\begin{array}{r}
 16 \overline{)469} \\
 29 \text{ R } 5
 \end{array}$$

13.
$$\begin{array}{r}
 53 \overline{)954} \\
 18
 \end{array}$$



14. Use the table. What is the total amount of electricity a computer, a television, and a heater use in 1 hour? Show your work.

1.89 kilowatts; Find $0.09 + 0.3 + 1.5$.

15. **Number Sense** How many hours does it take for a light bulb to use as much electricity as a heater uses in 1 hour?

15 hours

DATA	Electricity Used	
	Appliance	Kilowatts Per Hour
	Computer	0.09
	Heater	1.5
	Light bulb	0.1
	Television	0.3

16. The cost of each plane ticket for the Baltazar family's summer vacation is \$329. If there are 7 family members, what is the total cost of the plane tickets?

\$2,303

17. **Make Sense and Persevere** Shannon biked in an endurance cycling race. She traveled 2,912 miles and biked about 95 miles each day. About how many days did it take her to complete the race?

Sample answer: About 30 days

18. **Algebra** Twelve buses bring a total of 420 people to The Alhambra in Granada, Spain. Each bus carries the same number of people. How many people are on each bus? Write and solve an equation to find p , the number of people on each bus.

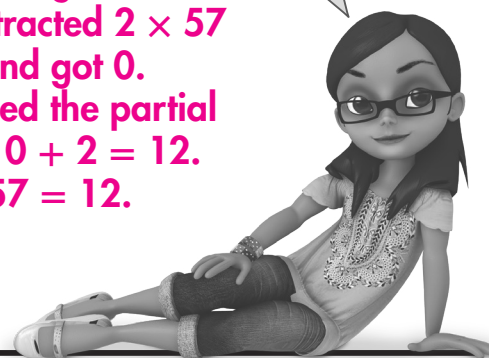
35 people are on each bus.

**Sample answer: $420 \div 12 = p$;
 $p = 35$**

19. **Higher Order Thinking** How can you use partial quotients to find $684 \div 57$? Explain.

Sample answer: I subtracted 10×57 from 684 and got 114. Then, I subtracted 2×57 from 114 and got 0. Then, I added the partial quotients: $10 + 2 = 12$. So, $684 \div 57 = 12$.

Use an estimate to see if your answer makes sense.



Assessment Practice

20. Which expressions are equivalent to 28?

- ☒ $980 \div 35$
☐ $480 \div 16$
☒ $1,400 \div 50$
☐ $625 \div 25$
☒ $1,680 \div 60$

21. Which expressions are equivalent to 53?

- ☐ $1,680 \div 40$
☒ $2,385 \div 45$
☐ $1,612 \div 62$
☒ $3,127 \div 59$
☒ $3,763 \div 71$