Visual Learning Animation

www.pearsonsuccessnet.com or CD

Step 1

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

428 ÷ 64 is about 420 ÷ 70, or 6.

Start dividing ones.

How can you estimate 428 ÷ 64? [Use compatible numbers. 420 ÷ 70]

Step 2

Divide the ones. Multiply and subtract.

```
      6 R44
64)428
   - 384
      44
```

428 ÷ 64 = 6 R44

What is 428 ÷ 64? [6 R44] *What does a remainder of 44 mean?* [Six sections are filled and there are 44 extra ticket holders to seat.]

Step 3

Check:

```
   64
 ×  6
  384
+ 44
  428
```

So, the theater must have 7 sections.

How many sections are needed to seat all 428 ticket holders? [7] *If only 384 tickets were sold, how many sections would they need?* [6]

Step 1

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

428 ÷ 64 is about 420 ÷ 70, or 6.

Start dividing ones.

Step 2

Divide the ones. Multiply and subtract.

```
      6 R44
64)428
   - 384
      44
```

428 ÷ 64 = 6 R44

Step 3

Check:

```
   64
 ×  6
  384
+ 44
  428
```

So, the theater must have 7 sections.

Guided Practice*

Do you know HOW?

Copy and complete.

1. 12)115 — 9; R 7; − 108; 7
2. 31)243 — 7; R 26; − 217; 26

Do you UNDERSTAND?

3. Can the remainder in either example be greater than the divisor? Why or why not? **See margin.**
4. In the example above, if the theater had sold 612 tickets, how many sections must it have? **10 sections**

Independent Practice

Leveled Practice Copy and complete.

5. 38)325 — 8; R2 1; − 304; 21
6. 52)403 — 3; 7 R 9; − 436; 39
7. 74)693 — 92; R 7; − 66 6; 27
8. 33)301 — 94; R; − 297; 4

In **9** through **24** divide.

9. 57)550 — **9 R37**
10. 29)254 — **8 R22**
11. 46)260 — **5 R30**
12. 56)528 — **9 R24**
13. 51)293 — **5 R38**
14. 19)119 — **6 R5**
15. 91)628 — **6 R82**
16. 40)180 — **4 R20**
17. 396 ÷ 42 — **9 R18**
18. 275 ÷ 38 — **7 R9**
19. 179 ÷ 22 — **8 R3**
20. 345 ÷ 85 — **4 R5**
21. 214 ÷ 28 — **7 R18**
22. 748 ÷ 81 — **9 R19**
23. 671 ÷ 79 — **8 R39**
24. 476 ÷ 68 — **7**

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

Lesson 5-5 131

3. No. If the remainder is greater than the divisor, then the quotient is too small.

2 Guided Practice

Formative Assessment

Remind students to use estimates to give them starting numbers for their division and to check the reasonableness of their answers. Have students turn lined notebook paper sideways to help them align the digits when copying the problems.

Exercise 4

Error Intervention

If students do not understand how to interpret the remainder after dividing,

then ask: *How many people sit in 9 sections of the theater?* [576] *Where would the remaining 36 people sit?* [In a 10th section] *Would the tenth section be full?* [No]

Reteaching For another example and more practice, assign **Reteaching** Set E on page 143.

3 Independent Practice

Remind students to estimate the quotient before dividing. After dividing, students should check their work by multiplying the quotient by the divisor and adding the remainder. Use Exercise 5 as an example. *What compatible numbers can I use to estimate the quotient?* [320 ÷ 40] *How can I check the answer?* [(8 × 38) + 21]

Leveled Practice Students who have difficulty keeping digits aligned when dividing can use graph paper when copying Exercises 5–8. Remind students that the problems have been started for them and that they should fill in the shaded boxes. Students who are more proficient can begin with Exercise 9.

Remind students that if they have a remainder that is greater than the divisor, then the digit in the quotient is too low.