

3 Develop the Concept

Problem Solving

Exercise	Content
25	Money Combinations of Bills
26	Division ($856 \div 8$)
27	Division ($648 \div 6$)
28	Division ($120 \div 4$)
29	Multiple Step [$97 - (10 \times 9)$]
30	Interpreting Remainders ($306 \div 8$)
31	Number Sense Communicate Math Understanding
32	Interpreting Remainders ($63 \div 6 = 10 \text{ R}3$)
33	Extra Information Division ($24 \div 6$)
34	Multiple Step [$(322 + 294) \div 2$]
35	Estimate quotient ($240 \div 8$)

Students use underlying processes and mathematical tools for Exercises 25–35. Remind students to check for reasonableness when solving each problem.

Exercise 31

To have students draw a conclusion from the relationship between the divisor and the quotient, have them find the quotients of several division problems. Have them start with $180 \div 6$. Continue with $180 \div 7$, $180 \div 8$, and $180 \div 9$. **What happens as the divisor increases?** [The quotient decreases.]

Exercise 32

Problem-Solving Skill: Interpreting Remainders The total number of roller coaster cars needs to include a remainder. **How many roller coaster cars will be completely filled?** [10] **Will there still be people waiting in line?** [Yes, 3 people] **How can you make sure that they get to ride the roller coaster?** [Add another car.]

Exercise 35

Test-Taking Tip: Understand the Question Remind students to read the question carefully. **The word about tells you that you don't need an exact answer.**

Problem Solving

25. Elena spent \$25 on a ring. She paid using \$10, \$5, and \$1 bills. If Elena gave the clerk 8 bills, how many of each bill did she give the clerk?
See margin.
26. Raul bought a collection of 856 baseball cards for \$40. If only 8 cards can fit on one page of an album, how many pages will Raul have to buy?
107 pages
27. The grandstand at the stadium has 648 seats. There are 6 equal sections. How many seats are in each section?
108 seats
28. Ali ran 120 kilometers over a four week period. On average, how many kilometers did he run each week?
30 km
29. **Number Sense** Harry filled one box with 9 pints of blueberries. He picked 97 pints of blueberries. If Harry filled 10 boxes, how many pints were left for the last box?
7 pt
30. A school raised \$306 washing cars. The money will be used to buy new recycling containers for the school. If each container costs \$8, how many containers can the school buy?
38 containers with \$2 left over
31. **Writing to Explain** Clare's teacher has a box of 180 stickers for a group of students to share equally. Does each student get more stickers if there are 6 students or if there are 9 students?
See margin.
32. Each car of the roller coaster can hold 6 people. If 63 people are waiting in line to ride the roller coaster, how many cars will be needed?
11 cars
33. Dora has 24 pairs of earrings. She keeps them in 6 boxes. Each box has the same number of earrings. Each pair of earrings costs between \$10 and \$20. How many pairs of earrings are in each box?
A 4
B 8
C 10
D 12
34. **Think About the Process** A home and garden show ran for two days. Tickets cost \$2 each. On the first day, ticket sales totaled \$322. On the second day, ticket sales were \$294. Which of the following shows how to determine the number of tickets sold?
A $(322 + 294) \div 2$
B $322 \times 294 \div 2$
C $(322 + 294) \times 2$
D $322 \div 2 + 294$
35. The world's longest cartoon strip has 242 panels. It was drawn by 35 artists in about 8 hours. About how many panels were drawn in one hour?
A 15 **B 20** **C 30** **D 45**

25. One \$10 bill, two \$5 bills, and five \$1 bills

31. 6 students; The dividend is the same, so dividing by a smaller divisor will result in a larger quotient.