

Interpret Remainders

When you solve a division problem with a remainder, the way you interpret the remainder depends on the situation and the question.

Way 1: Write the remainder as a fraction.

Callie has a board that is 60 inches long. She wants to cut 8 shelves of equal length from the board and use the entire board. How long will each shelf be?

Divide. $60 \div 8$ 7 r4

The remainder, 4 inches, can be divided into 8 equal parts.

$\frac{4}{8}$ ← remainder
 ← divisor

Write the remainder as a fraction.

Each shelf will be $7\frac{4}{8}$ inches long.

Way 2: Use only the quotient.

Callie has 60 beads. She wants to make 8 identical bracelets and use as many beads as possible on each bracelet. How many beads will be on each bracelet?

Divide. $60 \div 8$ 7 r4

The remainder is the number of beads left over. Those beads will not be used. Drop the remainder.

Callie will use 7 beads on each bracelet.

Way 3: Add 1 to the quotient.

Callie has 60 beads. She wants to put 8 beads in each container. How many containers will she need?

Divide. $60 \div 8$ 7 r4

The answer shows that Callie can fill 7 containers but will have 4 beads left over. She will need 1 more container for the 4 leftover beads. Add 1 to the quotient.

Callie will need 8 containers.

Way 4: Use only the remainder.

Callie has 60 stickers. She wants to give an equal number of stickers to 8 friends. She will give the leftover stickers to her sister. How many stickers will Callie give to her sister?

Divide. $60 \div 8$ 7 r4

The remainder is the number of stickers left over. Use the remainder as the answer.

Callie will give her sister 4 stickers.

- 1** There are 35 students going to the zoo. Each van can hold 6 students. How many vans are needed?

- 2** Sue has 55 inches of ribbon. She wants to cut the ribbon into 6 equal pieces. How long will each piece be?
