

Name \_\_\_\_\_

## Choose a Multiplication Method

Estimate. Then use regrouping to find  $47 \times 89$ .

$$\begin{array}{r} 89 \\ \times 47 \\ \hline \end{array}$$

**Step 1** Estimate the product.

$$50 \times 90 = 4,500$$

**Step 2** Multiply the 9 ones by the 7 ones. Regroup the 63 ones as 6 tens 3 ones.

$$\begin{array}{r} 6 \\ 89 \\ \times 47 \\ \hline 3 \end{array}$$

**Step 3** Multiply the 8 tens, or 80, by the 7 ones, or 7. Add the regrouped tens. Regroup the 62 tens as 6 hundreds 2 tens.

$$\begin{array}{r} 6 \\ 89 \\ \times 47 \\ \hline 623 \end{array}$$

**Step 4** Multiply the 9 ones by the 4 tens, or 40. Regroup the 36 tens as 3 hundreds 6 tens.

$$\begin{array}{r} 3 \\ 89 \\ \times 47 \\ \hline 623 \\ 60 \end{array}$$

**Step 5** Multiply the 8 tens, or 80, by the 4 tens, or 40. Add the regrouped tens. Regroup the 35 hundreds as 3 thousands 5 hundreds.

$$\begin{array}{r} 3 \\ 89 \\ \times 47 \\ \hline 623 \\ 3,560 \end{array}$$

**Step 6** Add the partial products.

$$\begin{array}{r} 3 \\ 89 \\ \times 47 \\ \hline 623 \end{array}$$

So,  $47 \times 89 = 4,183$ . Since 4,183 is close to the estimate of 4,500, it is reasonable.

$$\begin{array}{r} + 3,560 \\ \hline 4,183 \end{array}$$

Estimate. Then choose a method to find the product.

1. Estimate: \_\_\_\_\_ 2. Estimate: \_\_\_\_\_ 3. Estimate: \_\_\_\_\_ 4. Estimate: \_\_\_\_\_

$$\begin{array}{r} 76 \\ \times 31 \\ \hline \end{array}$$

$$\begin{array}{r} 24 \\ \times 35 \\ \hline \end{array}$$

$$\begin{array}{r} 14 \\ \times 28 \\ \hline \end{array}$$

$$\begin{array}{r} 64 \\ \times 56 \\ \hline \end{array}$$

**Choose a Multiplication Method**

Estimate. Then choose a method to find the product.

1. Estimate: **1,200**    2. Estimate: \_\_\_\_\_    3. Estimate: \_\_\_\_\_    4. Estimate: \_\_\_\_\_

$$\begin{array}{r} 31 \\ \times 43 \\ \hline \end{array}$$

$$\begin{array}{r} 67 \\ \times 85 \\ \hline \end{array}$$

$$\begin{array}{r} 68 \\ \times 38 \\ \hline \end{array}$$

$$\begin{array}{r} 95 \\ \times 17 \\ \hline \end{array}$$

$$\begin{array}{r} 93 \\ + 1,240 \\ \hline 1,333 \end{array}$$

5. Estimate: \_\_\_\_\_    6. Estimate: \_\_\_\_\_    7. Estimate: \_\_\_\_\_

$$\begin{array}{r} 49 \\ \times 54 \\ \hline \end{array}$$

$$\begin{array}{r} 91 \\ \times 26 \\ \hline \end{array}$$

$$\begin{array}{r} 82 \\ \times 19 \\ \hline \end{array}$$

8. Estimate: \_\_\_\_\_    9. Estimate: \_\_\_\_\_    10. Estimate: \_\_\_\_\_    11. Estimate: \_\_\_\_\_

$$\begin{array}{r} 46 \\ \times 27 \\ \hline \end{array}$$

$$\begin{array}{r} 41 \\ \times 33 \\ \hline \end{array}$$

$$\begin{array}{r} 97 \\ \times 13 \\ \hline \end{array}$$

$$\begin{array}{r} 75 \\ \times 69 \\ \hline \end{array}$$

**Problem Solving** 

12. A movie theatre has 26 rows of seats. There are 18 seats in each row. How many seats are there in all?
13. Each class at Briarwood Elementary collected at least 54 cans of food during the food drive. If there are 29 classes in the school, what was the least number of cans collected?

\_\_\_\_\_

\_\_\_\_\_