

Name _____

Multiply with Regrouping

Estimate. Then use regrouping to find 28×43 .**Step 1** Round to estimate the product. $30 \times 40 = 1,200$

Step 2 Think: $28 = 2$ tens 8 ones.
 Multiply 43 by 8 ones.
 $8 \times 3 = 24$. Record the 4. Write the regrouped 2 above the tens place.
 $8 \times 40 = 320$. Add the regrouped tens: $320 + 20 = 340$.

$$\begin{array}{r} \cancel{2} \\ 43 \\ \times 28 \\ \hline 344 \end{array} \leftarrow 8 \times 43$$

Step 3 Multiply 43 by 2 tens.
 $20 \times 3 = 60$ and $20 \times 40 = 800$.
 Record 860 below 344.

$$\begin{array}{r} \cancel{2} \\ 43 \\ \times 28 \\ \hline 344 \\ 860 \\ \hline \end{array} \leftarrow 20 \times 43$$

Step 4 Add the partial products.

$$\begin{array}{r} 1,204 \\ \leftarrow 344 + 860 \end{array}$$

So, $28 \times 43 = \underline{1,204}$. 1,204 is close to 1,200. The answer is reasonable.**Estimate. Then find the product.**

1. Estimate: _____

2. Estimate: _____

3. Estimate: _____

$$\begin{array}{r} 36 \\ \times 12 \\ \hline \end{array}$$

$$\begin{array}{r} 43 \\ \times 29 \\ \hline \end{array}$$

$$\begin{array}{r} 51 \\ \times 47 \\ \hline \end{array}$$

Multiply with Regrouping

Estimate. Then find the product.

1. Estimate: 2,700

$$\begin{array}{r} 2 \\ 1 \\ 87 \\ \times 32 \\ \hline 174 \\ + 2,610 \\ \hline 2,784 \end{array}$$

Think: 87 is close to 90 and 32 is close to 30.

$$90 \times 30 = 2,700$$

2. Estimate: _____

$$\begin{array}{r} 73 \\ \times 28 \\ \hline \end{array}$$

3. Estimate: _____

$$\begin{array}{r} 48 \\ \times 38 \\ \hline \end{array}$$

4. Estimate: _____

$$\begin{array}{r} 59 \\ \times 52 \\ \hline \end{array}$$

5. Estimate: _____

$$\begin{array}{r} 84 \\ \times 40 \\ \hline \end{array}$$

6. Estimate: _____

$$\begin{array}{r} 83 \\ \times 77 \\ \hline \end{array}$$

7. Estimate: _____

$$\begin{array}{r} 91 \\ \times 19 \\ \hline \end{array}$$

Problem Solving 

8. Baseballs come in cartons of 84 baseballs. A team orders 18 cartons of baseballs. How many baseballs does the team order?
9. There are 16 tables in the school lunch room. Each table can seat 22 students. How many students can be seated at lunch at one time?