






LETTER HOME

Multiplication with Larger Numbers

Dear Family Member:

In Units 4 and 7, your child learned to multiply using different strategies and methods. Now, your child will use this knowledge of multiplication to solve problems like 62×79 . As in the earlier units, students approach the problems using a variety of methods and strategies. By listening to each other and trying different ways, students develop a deeper number sense for multiplication and greater mental flexibility for solving problems. They learn to identify when an answer “doesn’t seem right” and needs to be reworked.

Multidigit Multiplication Strategies Menu: Paper-and-Pencil Methods

<p>7×326</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%; border: 1px solid black; padding: 5px;"> $7 \times 300 = 2100$ </td> <td style="width: 33%; border: 1px solid black; padding: 5px;"> $7 \times 20 = 140$ </td> <td style="width: 33%; border: 1px solid black; padding: 5px;"> $7 \times 6 = 42$ </td> </tr> </table> <p style="text-align: right;"> $\begin{array}{r} 2100 \\ 140 \\ + 42 \\ \hline 2282 \end{array}$ </p>	$7 \times 300 = 2100$	$7 \times 20 = 140$	$7 \times 6 = 42$	<p style="text-align: center;">Using Rectangles</p> <div style="display: flex; align-items: center; justify-content: space-around;"> <div style="text-align: center;">  <p>Michael</p> </div> <div style="text-align: center;"> <p>28×63</p> <table style="border: 1px solid black; padding: 5px;"> <tr> <td style="width: 50%;">$20 \times 60 = 1200$</td> <td style="width: 50%;">$20 \times 3 = 60$</td> </tr> <tr> <td>$8 \times 60 = 480$</td> <td>$8 \times 3 = 24$</td> </tr> </table> </div> </div> <p style="text-align: right;"> $\begin{array}{r} 1200 \\ 480 \\ 60 \\ + 24 \\ \hline 1764 \end{array}$ </p>	$20 \times 60 = 1200$	$20 \times 3 = 60$	$8 \times 60 = 480$	$8 \times 3 = 24$
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<p style="text-align: center;">All Partial</p> <div style="display: flex; align-items: center; justify-content: space-around;"> <div style="text-align: center;">  <p>Jacob</p> </div> <div style="text-align: center;">  <p>Shannon</p> </div> </div> <p> $\begin{array}{r} 326 \\ \times 7 \\ \hline 2100 \\ 140 \\ + 42 \\ \hline 2282 \end{array}$ </p> <p> $\begin{array}{r} 63 \\ \times 28 \\ \hline 1200 \\ 480 \\ 60 \\ + 24 \\ \hline 1764 \end{array}$ </p>	<p style="text-align: center;">Expanded Form</p> <p> $63 = 60 + 3$ </p> <p> $\begin{array}{r} 63 \\ \times 28 \\ \hline 1200 \\ 480 \\ 60 \\ + 24 \\ \hline 1764 \end{array}$ </p> <p> $326 = 300 + 20 + 6$ </p> <p> $\begin{array}{r} 326 \\ \times 7 \\ \hline 2100 + 140 + 42 = 2282 \end{array}$ </p>							
<p style="text-align: center;">Compact</p> <div style="display: flex; align-items: center; justify-content: space-around;"> <div style="text-align: center;">  <p>Keenya</p> </div> <div style="text-align: center;"> $\begin{array}{r} 14 \\ 326 \\ \times 7 \\ \hline 2282 \end{array}$ </div> <div style="text-align: center;"> $\begin{array}{r} 2 \\ 63 \\ \times 28 \\ \hline 504 \\ 1260 \\ \hline 1764 \end{array}$ </div> </div>	<p style="text-align: center;">Combination</p> <div style="display: flex; align-items: center; justify-content: space-around;"> <div style="text-align: center;">  <p>Roberto</p> </div> </div> <p> $\begin{array}{r} 63 \\ \times 28 \\ \hline 1260 \\ + \\ \begin{array}{r} 2 \\ 63 \\ \times 8 \\ \hline 504 \end{array} \\ \hline 1764 \end{array}$ </p>							

Use the following activities to help your child at home:

Multiplication Strategies. Have your child show you how to solve a multiplication problem in different ways. See the Strategies Menu above. Ask about his or her favorite way. Challenge him or her to solve problems such as 5×48 or 99×7 using mental math.

Estimation Strategies. Continue to encourage estimation. Before solving a problem, ask about how big your child thinks the answer will be. After solving it, have him or her compare the estimate with the answer and ask, “Is the answer reasonable?”

Play the Multiplication Digits Game. In this game, students draw numbers from a set of Digit Cards 0–9 and place the digit on a multiplication playing board. The winner makes the largest product. Directions are in the *Student Activity Book*.

Math Facts and Mental Math

This unit continues the review of the division facts. Help your child using the activities below.

Division Facts. Students review the following division facts for the last six facts to maintain and increase fluency and to learn to apply division strategies to larger numbers.

Division facts for the last six facts:

$$42 \div 6, 42 \div 7, 24 \div 6, 24 \div 4, 28 \div 4, 28 \div 7, 32 \div 4, 32 \div 8, 48 \div 6, 48 \div 8, 56 \div 8, 56 \div 7$$

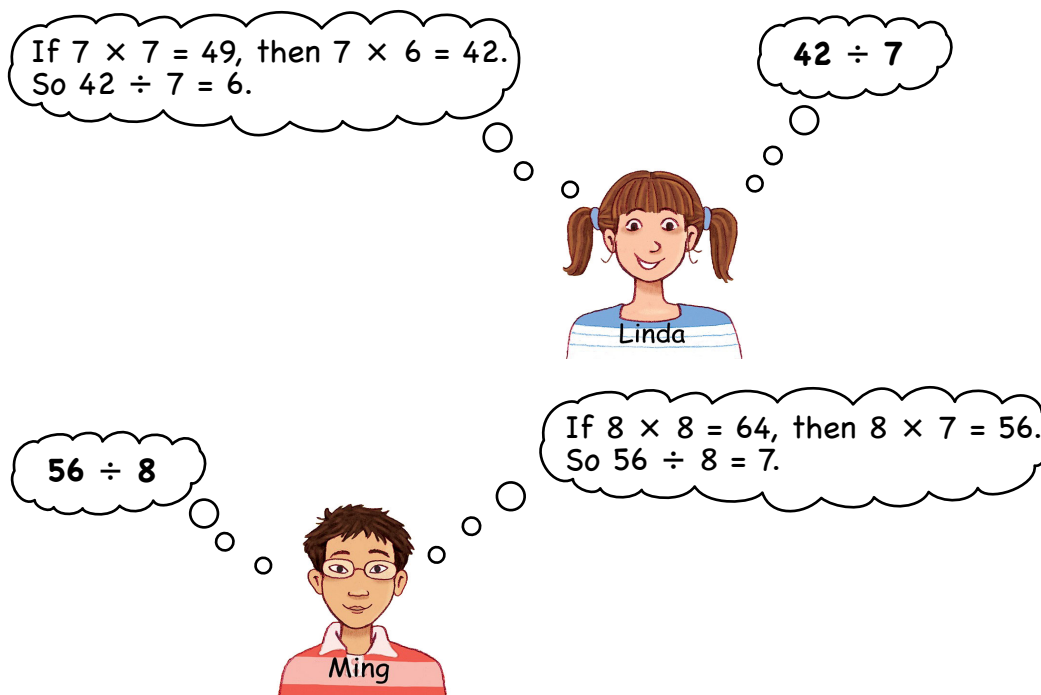
You can help your child review these facts using the Triangle Flash Cards that are sent home or by making a set of flash cards from index cards or scrap paper. Study the facts in small groups each night. As your child goes through the flash cards, put the cards in three stacks: Facts I Know Quickly, Facts I Can Figure Out, and Facts I Need to Learn.

For Facts I Need to Learn, work on strategies for figuring them out. Students should use multiplication facts they know to reason their way to a solution to a division fact.

Start with the multiplication fact. If your child does not know the multiplication fact related to the division fact, start by developing strategies to solve that multiplication fact.

Turn-around facts. To solve $28 \div 7$: I know $7 \times 4 = 28$, so $28 \div 7 = 4$.

Reasoning from known facts. To solve $32 \div 4$: I know $32 \div 2 = 16$, so $32 \div 4$ is half of 16. $32 \div 4 = 8$.



For Facts I Can Figure Out, use the flash cards to practice the facts for fluency.

For Facts I Know Quickly, help your child use strategies to solve problems like these using mental math:

Dividing 10s and 100s: $320 \div 8$, $280 \div 70$, $5600 \div 700$

Thank you for taking time to talk with your child about what he or she is doing in math.

Sincerely,