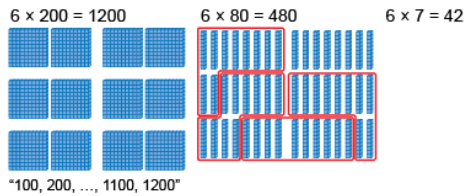# Activity 35 Assessment
Multiplying and Dividing Larger Numbers Consolidation

Conceptual Meaning of Multiplication and Division with Larger Numbers

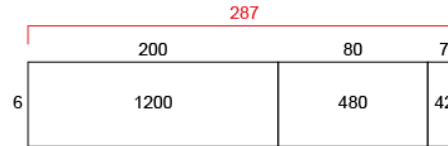| Models multiplication and division situations concretely and pictorially	Models multiplication and division situations using an open array.	Uses place value to multiply whole numbers by 10, 100, and 1000 and to divide by 10.
$6 \times 287 = ?$ 6 × 200 = 1200 6 × 80 = 480 6 x 7 = 42 "100, 200, ..., 1100, 1200" $1200 + 480 + 42 = 1722$ "I traded groups of 10 rods for a flat."	$6 \times 287 = ?$ 287 200 | 80 | 7 6 | 1200 | 480 | 42 "I can use an open array to help me multiply."	$60 \times 7 \times 100 = 6 \times 10 \times 7 \times 100$ $\qquad = 42 \times 1000$ $\qquad = 42\,000$ "I used the associative property to make friendly numbers, then used the known fact $6 \times 7 = 42$."

Observations/Documentation

Conceptual Meaning of Multiplication and Division with Larger Numbers (cont'd)

Decomposes numbers and use partial products and partial quotients to multiply and divide.	Estimates to determine if answer to multiplication or division problem is reasonable.	Creates and solves multiplication and division problems flexibly using a variety of strategies.
$6 \times 287 = ?$ $$\begin{array}{r} 287 \\ \times6 \\ \hline 42 \\ 480 \\ +1200 \\ \hline 1722 \end{array}$$ 7×6 80×6 200×6 "I decomposed 287 into hundreds, tens, and ones, then used partial products to multiply."	$6 \times 287 = 1722$ 287 is close to 300. $6 \times 300 = 1800$ 1800 is close to the answer I calculate, 1722. So, my answer is reasonable.	$123 \div 6 = ?$ "I counted 123 photographs to put in an album. Each page can hold 6 photographs. How many pages will I need?" $$\begin{array}{r} 6 \overline{)\,123} \\ \underline{60}\ \ 10 \\ 63 \\ \underline{60}\ \ 10 \\ R\,3\ \ \underline{20} \end{array}$$ "I round up to 21 pages to be sure all photos will fit."

Observations/Documentation