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| **Conceptual Meaning of Multiplication and Division with Larger Numbers** |
| Models multiplication and division situations concretely and pictorially6 × 287 = ? “I traded groups of 10 rods for a flat.” | Models multiplication and division situations using an open array6 × 287 = ? “I can use an open array to help me multiply.” | Uses place value to multiply and divide natural numbers by 10, 100, and 100034 × 200 = 34 × 2 × 100 = 68 × 100 = 6800“I used the associative property to make friendly numbers.” |
| **Observations/Documentation** |
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| **Conceptual Meaning of Multiplication and Division with Larger Numbers (cont’d)** |
| Decomposes numbers and uses standard algorithm to multiply and divide6 × 287 = ?“I used the standard algorithm to multiply the numbers.” | Estimates to determine if answer to multiplication or division problem is reasonable6 × 287 = 1722287 is close to 300.6 × 300 = 1800“1800 is close to the answer I calculate, 1722.So, my answer is reasonable.” | Creates and solves multiplication and division problems flexibly using a variety of strategies 123 ÷ 6 =?“I counted 123 photographs to put in an album. Each page can hold 6 photographs. How many pages will I need?”“I round up to 21 pages to be sure all photos will fit.” |
| **Observations/Documentation** |
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