

Activity 21 Assessment

Strategies for Multiplying Larger Numbers

Fluency with Multiplication and Division Facts

Recalls multiplication and division facts to demonstrate and fluently recall facts to 100.

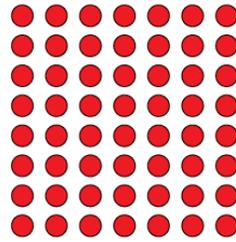
$$8 \times 7 = 56$$

"I know my facts up to 10×10 ."

Uses inverse operation to find multiplication and division facts.

$$56 \div 8 = ?$$

$$8 \times ? = 56$$



"I can use multiplication to solve division problems."

Applies estimation strategies to multiply and divide larger numbers.

Gardeners planted 236 plants in rows of 5.
Estimate how many rows were planted.

$$236 \div 5 = ?$$

"I know $100 \div 5 = 20$, so $200 \div 5 = 40$.
Because 236 is close to 200,
I estimate about 40 rows."

Observations/Documentation

Activity 21 Assessment

Strategies for Multiplying Larger Numbers

Fluency with Multiplication and Division Facts (cont'd)

Uses mental math strategies and properties of operations to multiply and divide larger numbers.

$$5 \times 47 = ?$$

"I can decompose the numbers to make it easier to multiply:
 $5 \times 40 = 200$, $5 \times 7 = 35$,
 and $200 + 35 = 235$."

Applies properties of operations and partial products and connects to algorithms.

$$16 \times 12 = ?$$

	10	6
10	10×10	6×10
2	10×2	6×2

$$\begin{aligned} 16 \times 12 &= (10 \times 10) + (10 \times 2) + (6 \times 10) + (6 \times 2) \\ &= 100 + 20 + 60 + 12 \\ &= 192 \end{aligned}$$

Flexibly and fluently selects strategies and properties of operations to solve problems involving larger numbers.

375 students are going on a field trip. Each bus holds 25 students. How many buses are needed?

$$\begin{array}{r} 25 \overline{)375} \quad 10 \\ \underline{250} \\ 125 \\ \underline{125} \\ 0 \end{array} \begin{array}{l} 10 \\ 5 \\ 15 \end{array}$$

"I subtracted multiples of 25, then added."

Observations/Documentation