

Fluency Practice (10 minutes)

- Reasoning about Multiplication and Division and Place Value **6.NS.B.3**

Reasoning about Multiplication and Division and Place Value

Use the fact that $13 \times 17 = 221$ to find the following.

- 13×1.7
- 130×17
- 13×1700
- 1.3×1.7
- $2210 \div 13$
- $22100 \div 17$
- $221 \div 1.3$

IM Commentary

The tasks in this set are not examples of tasks asking students to compute using the standard algorithms for multiplication and division because most people know what those kinds of problems look like. Instead, these tasks show what kinds of reasoning and estimation strategies students need to develop in order to support their algorithmic computations.

Fluency Practice (10 minutes)

- Rapid Whiteboard Exchange: **4.NBT.B**

Rapid Whiteboard Exchange

Whiteboard exchange:

- 52×23
- 47×19
- 72×32
- 81×27
- 55×88
- 12×45
- 38×56
- 25×62

Fluency Practice (10 minutes)**Number Talk: 4.NBT.B**

Today's fluency activity is a Number Talk. Present the problems to students and ask them to solve them using mental math strategies. Give students a few minutes to quietly think and give a signal when they have an answer and a strategy. When most students have an answer, ask students to share their answers.

$$\frac{1}{5} \text{ of } 10$$

$$\frac{3}{5} \text{ of } 10$$

$$\frac{4}{5} \text{ of } 10$$

$$\frac{1}{4} \text{ of } 12$$

$$\frac{3}{4} \text{ of } 12$$

$$\frac{1}{3} \text{ of } 15$$

$$\frac{2}{3} \text{ of } 15$$

As students share, ask, "Who thought about it a different way?" Record the various answers from students.

To involve more students in the conversation, consider asking:

- "Who can restate ___'s reasoning in a different way?"
- "Did anyone solve the problem the same way but would explain it differently?"
- "Did anyone solve the problem in a different way?"
- "Does anyone want to add on to ___'s strategy?"
- "Do you agree or disagree? Why?"