

Task Model 3E.2

- Two or more approaches or chains of reasoning are given and the student is asked to identify the correct method and justification OR identify the incorrect method/reasoning and the justification.

Example Item 3E.2a (Grade 7)

Primary Target 3E (Content Domain NS), Secondary Target 1B (CCSS 6.NS.A), Tertiary Target 3C

Clyde and Lily were solve the equation $\frac{8}{9} \div \frac{1}{2} = x$.

Clyde said, "I can think of this division problem as a multiplication problem." Then he wrote:

Step 1. $\frac{8}{9} \div \frac{1}{2} = x$

Step 2. $\frac{1}{2}x = \frac{8}{9}$

Step 3. $2\left(\frac{1}{2}x\right) = 2\left(\frac{8}{9}\right)$

Step 4. $x = \frac{16}{9}$

Lily said, "You need to invert and multiply." Then she wrote:

Step 1. $\frac{8}{9} \div \frac{1}{2} = x$

Step 2. $\frac{8}{9} = 2 \cdot x$

Step 3. $\frac{1}{2}(2x) = \left(\frac{1}{2}\right) \cdot \left(\frac{8}{9}\right)$

Step 4. $x = \frac{8}{18}$

Who solved the problem correctly?

- A. Only Clyde solved the equation correctly.
- B. Only Lily solved the equation correctly.
- C. They both solved the equation correctly.
- D. Neither one solved the equation correctly.

Rubric: (1 point) The student selects the correct characterization of these two approaches (A).

Response Type: Multiple choice, single correct response