NAME DATE PERIOD

Assessment

Dividing Fractions: End-of-Unit Assessment

Calculators should not be used.

- 1. Mai biked $6\frac{3}{4}$ miles today, and Noah biked $4\frac{1}{2}$ miles. How many times the length of Noah's bike ride was Mai's bike ride?
 - a. $\frac{2}{3}$ times as far
 - b. $\frac{3}{2}$ times as far
 - c. $\frac{9}{4}$ times as far
 - d. $\frac{243}{8}$ times as far
- 2. Select \boldsymbol{all} equations that represent this question:

Priya is stacking building blocks to make a tower. She takes a break when the tower is $2\frac{1}{2}$ feet tall, which is $\frac{5}{8}$ of the height of the tower she wants to build. How tall is the tower when finished?

a.
$$\frac{5}{8} \bullet ? = 2\frac{1}{2}$$

b.
$$\frac{5}{8} \div 2\frac{1}{2} = ?$$

c.
$$2\frac{1}{2} \cdot ? = \frac{5}{8}$$

d.
$$2\frac{1}{2} \cdot \frac{5}{8} = ?$$

e.
$$2\frac{1}{2} \cdot \frac{8}{5} = ?$$

f.
$$2\frac{1}{2} \div \frac{5}{8} = ?$$

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- 3. Select **all** statements that show correct reasoning for finding $15 \div \frac{2}{9}$.
 - a. Multiply 15 by 2, then divide by 9.
 - b. Multiply 15 by 9, then divide by 2.
 - c. Multiply 15 by $\frac{1}{9}$, then multiply by 2.
 - d. Multiply 15 by 9, then multiply by $\frac{1}{2}$.
- 4. Divide.

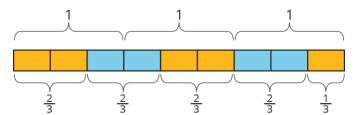
a.
$$\frac{3}{4} \div \frac{1}{5}$$

c.
$$\frac{4}{9} \div \frac{8}{15}$$

b.
$$\frac{9}{2} \div \frac{3}{4}$$

d.
$$5\frac{2}{3} \div \frac{3}{2}$$

5. Andre draws this tape diagram for $3 \div \frac{2}{3}$:



Andre says that $3 \div \frac{2}{3} = 4\frac{1}{3}$ because there are 4 groups of $\frac{2}{3}$ and $\frac{1}{3}$ left. Do you agree with Andre? Explain your reasoning.



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6. How many $\frac{1}{3}$ inch cubes does it take to fill a box with width $2\frac{2}{3}$ inches, length $3\frac{1}{3}$ inches, and height $2\frac{1}{3}$ inches?

- 7. Lin has two small baking pans, each shaped like a rectangular prism. For each question, explain or show your reasoning.
 - a. Lin lines the bottom of her first pan with aluminum foil. The area of the rectangular piece of foil is $11\frac{1}{4}$ square inches. Its length is $4\frac{1}{2}$ inches. What is the width of the foil?
 - b. Lin's second pan has a length of $\frac{8}{3}$ inches, a width of $\frac{15}{4}$ inches, and a height of $\frac{3}{2}$ inches. What is the volume of the second pan?

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