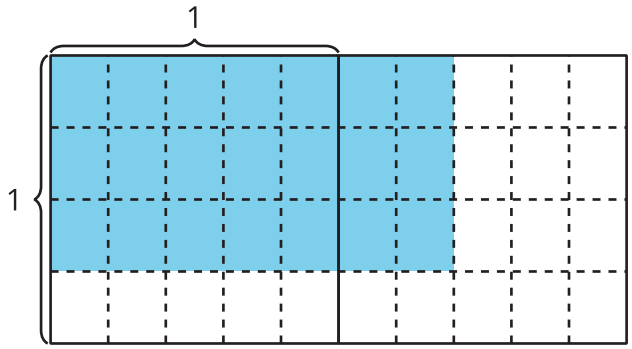
Multiplying and Dividing Fractions: End-of-Unit Assessment

1. Select **all** statements that are true about the diagram.



A. The area of each small shaded piece is $\frac{1}{4} \times \frac{1}{5}$ square unit.

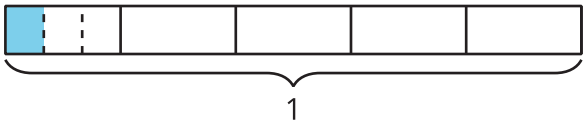
B. The area of the shaded region is 21 square units.

C. The area of the shaded region is $\frac{3}{4} \times \frac{7}{5}$ square units.

D. The area of the shaded region is $\frac{20}{21}$ square units.

E. The area of the shaded region is $\frac{21}{20}$ square units.

2. Select **all** expressions that represent the shaded region.



A. $\frac{1}{3} + \frac{1}{5}$

B. $\frac{1}{5} \div 3$

C. $\frac{1}{3} \times \frac{1}{5}$

D. $\frac{1}{3}$

E. $\frac{1}{7}$

3. Match each expression with its value.

A. $5 \div \frac{1}{3}$	1. $\frac{1}{150}$
B. $\frac{1}{3} \div 5$	2. $\frac{1}{15}$
C. $\frac{1}{30} \div 5$	3. 15
D. $5 \div \frac{1}{30}$	4. 150

4. 440 meters is $\frac{1}{4}$ of the way around the race track. How far is it around the whole race track? Explain or show your reasoning.

5. Find the value of each product.

   a. $\frac{3}{12} \times \frac{2}{5}$

   b. $\frac{8}{6} \times \frac{10}{11}$

   c. $4 \times 6\frac{9}{10}$

   d. $7\frac{3}{5} \times 4$

6. An apple weighs $\frac{1}{2}$ pound. Diego cuts the apple into 4 equal pieces. How many pounds does each piece of the apple weigh? Explain your reasoning.

7. A container holds $\frac{4}{5}$ liter of water. During a hike, Jada drank $\frac{2}{3}$ of the water. How much water did Jada drink? Explain your reasoning.

8. Each square tile on a bathroom floor measures $\frac{3}{2}$ feet by $\frac{3}{2}$ feet.
   a. What is the area of each tile?

   b. Mai says that the tiles have the same area as $\frac{3}{2}$ one-foot by one-foot tiles. Do you agree with Mai? Explain or show your reasoning.

   c. The bathroom floor is covered by 12 of the $\frac{3}{2}$ feet by $\frac{3}{2}$ feet tiles. What is the area of the bathroom floor? Show or explain your reasoning.