

Topic B Quiz Prep (Lessons 7 - 11)

Item 1: Area Model Representing 1 Whole

Consider the area model shown. The diagram represents 1.

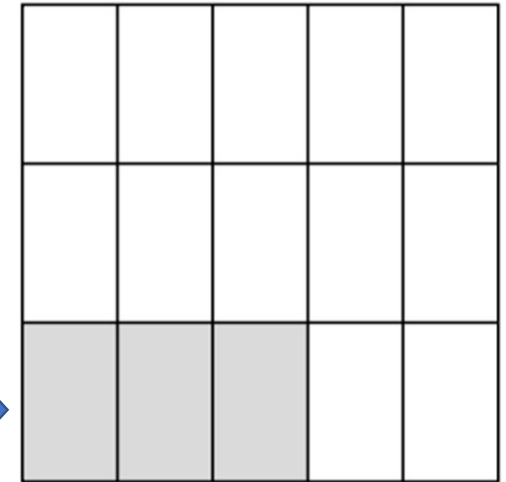
Complete the equation to represent the area model.

$$\frac{1}{3} \times \frac{3}{5} = \frac{3}{15}$$



Lastly, our math confirms that there are 3 boxes shaded out of 15 boxes.

Second, look at the number of rows with shaded boxes. We see one row that is shaded out of three. So, 1/3 is what we are taking of 3/5.



First, look at the number of columns with shaded boxes. We see three columns that are shaded out of five. So, 3/5 is what we are starting with.

Item 2: Multiply

$$\frac{1}{6} \times \frac{4}{5} = \frac{4}{30}$$

$$\frac{3}{10} \times \frac{5}{7} = \frac{15}{70}$$

$$\frac{8}{5} \times \frac{3}{4} = \frac{24}{20}$$

Topic B Quiz Prep (Lessons 7 - 11)

Item 3 & 4: Write >, =, <

$$\frac{1}{6} \times \frac{4}{5} < \frac{4}{5}$$

$$\frac{6}{6} \times \frac{4}{5} = \frac{4}{5}$$

REMEMBER the three RULES:

1. If you multiply a number by a fraction **LESS THAN ONE**, the product will be **LESS THAN** the original number.
2. If you multiply a number by a fraction **EQUAL TO ONE**, the product will be **EXACTLY EQUAL** to the original number.
3. If you multiply a number by a fraction **GREATER THAN ONE**, the product will be **GREATER THAN** the original number.

$$\frac{8}{6} \times \frac{4}{5} > \frac{4}{5}$$

Item 5: Greater Than / Less Than

KNOW THE RULES!

5. Consider the expression shown.

$$\frac{4}{9} \times \frac{7}{6}$$

Circle an answer choice in each box to make the statement true.

The product of $\frac{4}{9}$ and $\frac{7}{6}$ is (A) $\frac{7}{6}$ because $\frac{4}{9}$ is (B) 1.

A

greater than

less than

B

greater than

less than

Topic B Quiz Prep (Lessons 7 - 11)

Item 6: Area Model Representing 1 Whole

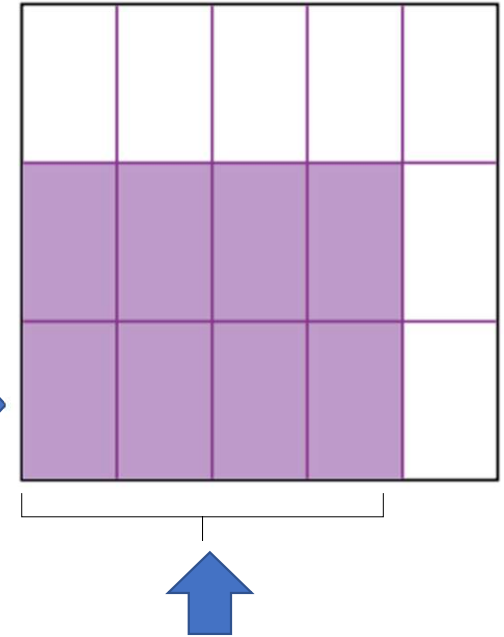
Consider the area model shown. The diagram represents 1.

Shade in the area model correctly.

$$\frac{2}{3} \times \frac{4}{5} = \frac{8}{15}$$

← **Lastly**, do the math and check to see if the correct total boxes is shaded. In this case, 8 boxes are shaded out of 15.

Second, shade the fraction $\frac{2}{3}$ going up. In this case, we are looking at $\frac{2}{3}$ and shading 2 of 3 rows going up.



First, shade the **first row** based on the fraction that you see in the expression. In this case, we are looking at $\frac{4}{5}$ and shading 4 of the 5 boxes **on the first row**.

Be able to explain what you did:

The model is portioned into **15 equal parts**.

8 of the parts are shaded.

The model shows **$\frac{8}{15}$** .