

Varied Fluency

Step 11: Multiply Fractions by Fractions

National Curriculum Objectives:

Mathematics Year 6: (6F2) [Use common factors to simplify fractions; use common multiples to express fractions in the same denomination](#)

Mathematics Year 6: (6F5a) [Multiply simple pairs of proper fractions, writing the answer in its simplest form \[for example, \$1/4 \times 1/2 = 1/8\$ \]](#)

Differentiation:

Developing Questions to support multiplying fractions by fractions. All numerators are 1. Pictorial support given for every question. All answers are less than 1.

Expected Questions to support multiplying fractions by fractions where numerators are any number. Some pictorial support is given. All answers are less than 1.

Greater Depth Questions to support multiplying fractions and mixed numbers, with and without diagrams. Questions include mixed numbers and improper fractions.

More [Year 6 Fractions](#) resources.

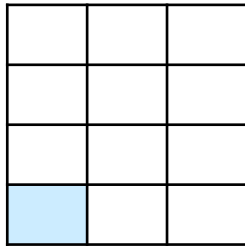
Did you like this resource? Don't forget to [review](#) it on our website.

Multiply Fractions by Fractions

Multiply Fractions by Fractions

1a. True or false? The answer to the calculation is shaded below.

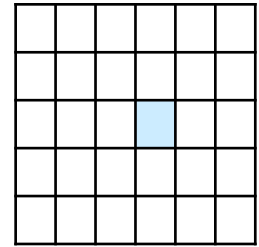
$$\frac{1}{3} \times \frac{1}{4} =$$



VF

1b. True or false? The answer to the calculation is shaded below.

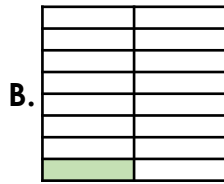
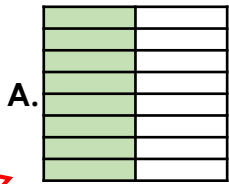
$$\frac{1}{5} \times \frac{1}{6} =$$



VF

2a. Which shaded representation correctly shows the answer to the calculation below?

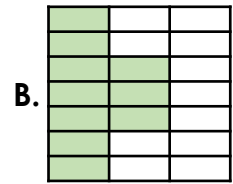
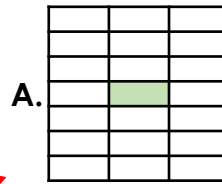
$$\frac{1}{8} \times \frac{1}{2} =$$



VF

2b. Which shaded representation correctly shows the answer to the calculation below?

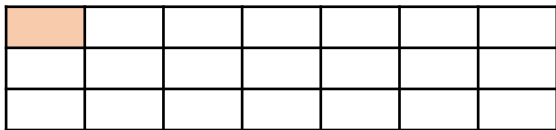
$$\frac{1}{7} \times \frac{1}{3} =$$



VF

3a. Work out the answer to the question below.

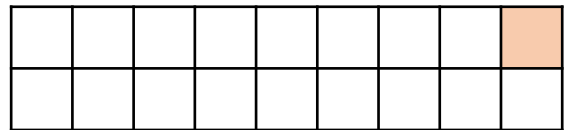
What is $\frac{1}{3}$ multiplied by $\frac{1}{7}$?



VF

3b. Work out the answer to the question below.

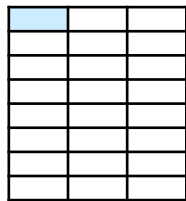
What is $\frac{1}{2}$ multiplied by $\frac{1}{9}$?



VF

4a. Fill in the missing number so that the calculation below is correct.

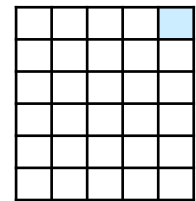
$$\frac{1}{\square} \times \frac{1}{8} = \frac{1}{24}$$



VF

4b. Fill in the missing number so that the calculation below is correct.

$$\frac{1}{6} \times \frac{1}{\square} = \frac{1}{30}$$



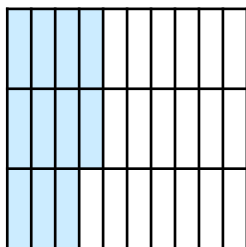
VF

Multiply Fractions by Fractions

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5a. True or false? The answer to the calculation is shaded below.

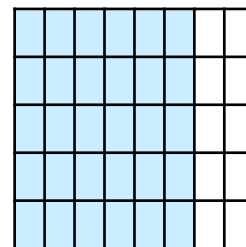
$$\frac{2}{3} \times \frac{9}{10} =$$



VF

5b. True or false? The answer to the calculation is shaded below.

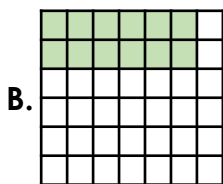
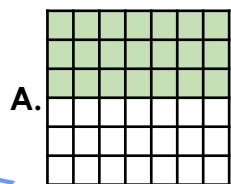
$$\frac{2}{5} \times \frac{7}{8} =$$



VF

6a. Which shaded representation correctly shows the answer to the calculation below?

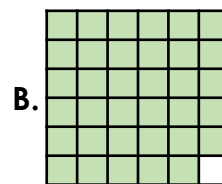
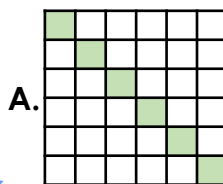
$$\frac{2}{6} \times \frac{6}{7} =$$



VF

6b. Which shaded representation correctly shows the answer to the calculation below?

$$\frac{3}{4} \times \frac{2}{9} =$$



VF

7a. Work out the answer to the question below. Give the answer in its simplest form.

What is $\frac{4}{5}$ multiplied by $\frac{5}{12}$?



VF

7b. Work out the answer to the question below. Give the answer in its simplest form.

What is $\frac{5}{6}$ multiplied by $\frac{9}{10}$?



VF

8a. Fill in the missing numbers so that the calculation below is correct.

$$\frac{\square}{11} \times \frac{2}{\square} = \frac{18}{44}$$



VF

8b. Fill in the missing numbers so that the calculation below is correct.

$$\frac{\square}{12} \times \frac{4}{\square} = \frac{44}{60}$$



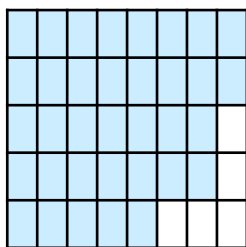
VF

Multiply Fractions by Fractions

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9a. True or false? The answer to the calculation is shaded below.

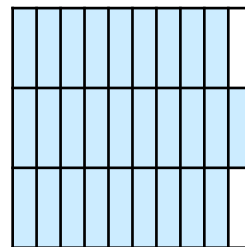
$$\frac{5}{10} \times \frac{7}{4} =$$



VF

9b. True or false? The answer to the calculation is shaded below.

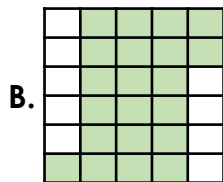
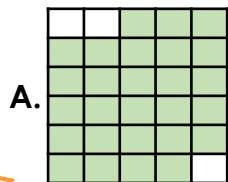
$$\frac{7}{6} \times \frac{4}{5} =$$



VF

10a. Which shaded representation correctly shows the answer to the calculation below?

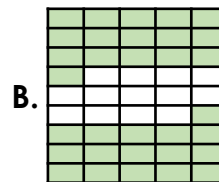
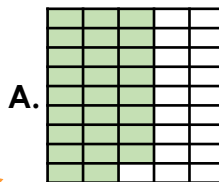
$$\frac{9}{6} \times \frac{3}{5} =$$



VF

10b. Which shaded representation correctly shows the answer to the calculation below?

$$\frac{8}{5} \times \frac{4}{9} =$$



VF

11a. Work out the answer to the question below. Give the answer as a mixed number in its simplest form.

What is $\frac{11}{12}$ multiplied by $\frac{8}{4}$?



VF

11b. Work out the answer to the question below. Give the answer as a mixed number in its simplest form.

What is $\frac{9}{11}$ multiplied by $\frac{5}{3}$?



VF

12a. Fill in the missing numbers so that the calculation below is correct.

$$\frac{8}{9} \times \frac{\square}{\square} = \frac{72}{63}$$



VF

12b. Fill in the missing numbers so that the calculation below is correct.

$$\frac{7}{12} \times \frac{\square}{\square} = \frac{70}{36}$$



VF

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Developing

1a. **True**

2a. **B**

3a. $\frac{1}{21}$

4a. $\frac{1}{\boxed{3}} \times \frac{1}{8} = \frac{1}{24}$

Expected

5a. **False.** The shaded fraction is $\frac{11}{30}$. It should be $\frac{18}{30}$.

6a. **B**

7a. $\frac{1}{3}$

8a. $\frac{\boxed{9}}{11} \times \frac{2}{\boxed{4}} = \frac{18}{44}$

Greater Depth

9a. **True**

10a. **A**

11a. $1\frac{5}{6}$

12a. $\frac{8}{9} \times \frac{\boxed{1}}{\boxed{2}} \times \frac{\boxed{2}}{7} = \frac{72}{63}$

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Developing

1b. **True**

2b. **A**

3b. $\frac{1}{18}$

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

Expected

5b. **False.** The shaded fraction is $\frac{30}{40}$. It should be $\frac{14}{40}$.

6b. **A**

7b. $\frac{3}{4}$

8b. $\frac{\boxed{11}}{12} \times \frac{4}{\boxed{5}} = \frac{44}{60}$

Greater Depth

9b. **True**

10b. **B**

11b. $1\frac{4}{11}$

12b. $\frac{7}{12} \times \frac{\boxed{3}}{\boxed{1}} \times \frac{\boxed{1}}{3} = \frac{70}{36}$