

Varied Fluency

Step 17: Multiply Non-Unit Fractions by an Integer

National Curriculum Objectives:

Mathematics Year 5: (5F5) [Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams](#)

Mathematics Year 5: (5F2a) [Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements \$> 1\$ as a mixed number \[for example, \$2/5 + 4/5 = 6/5 = 1 \frac{1}{5}\$ \]](#)

Mathematics Year 5: (5F2b) [Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths](#)

Differentiation:

Developing Questions to support multiplying non-unit fractions by integers. Images provided for support.

Expected Questions to support multiplying non-unit fractions by integers. Fractions may need to be reduced to their simplest form using knowledge of equivalent fractions or improper fractions converted to mixed numbers. Images provided for support.

Greater Depth Questions to support multiplying non-unit fractions by integers. Fractions will need to be reduced to their simplest form using knowledge of equivalent fractions and improper fractions converted to mixed numbers. No images provided.

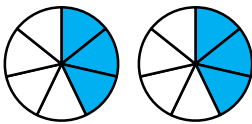
More [Year 5 Fractions](#) resources.

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

Multiply Non-Unit Fractions by an Integer

Multiply Non-Unit Fractions by an Integer

1a. Match the calculation to the correct answer.

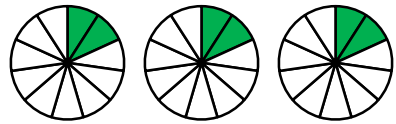
$$\frac{3}{7} \times 2 =$$


- A. $\frac{6}{7}$ B. $\frac{12}{14}$ C. $\frac{3}{14}$



VF

1b. Match the calculation to the correct answer.

$$\frac{2}{11} \times 3 =$$


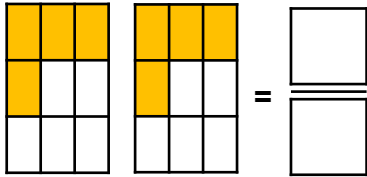
- A. $\frac{11}{6}$ B. $\frac{6}{33}$ C. $\frac{6}{11}$



VF

2a. Solve the calculation below.

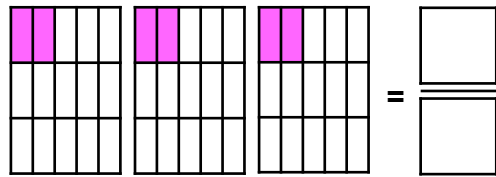
$$\frac{4}{9} \times 2 =$$



VF

2b. Solve the calculation below.

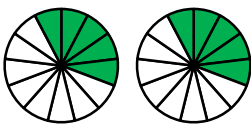
$$\frac{2}{15} \times 3 =$$



VF

3a. True or false?

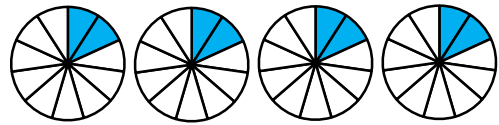
$$\frac{5}{13} \times 2 = \frac{10}{26}$$



VF

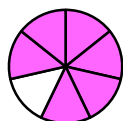
3b. True or false?

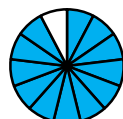
$$\frac{2}{11} \times 4 = \frac{8}{11}$$



VF

4a. Complete the calculations.

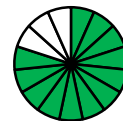
A. $\frac{3}{7} \times \square =$ 

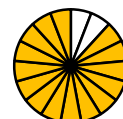
B. $\frac{2}{13} \times \square =$ 



VF

4b. Complete the calculations.

A. $\frac{4}{15} \times \square =$ 

B. $\frac{3}{17} \times \square =$ 

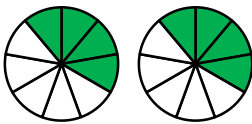


VF

Multiply Non-Unit Fractions by an Integer

Multiply Non-Unit Fractions by an Integer

5a. Match the calculation to the correct answer.

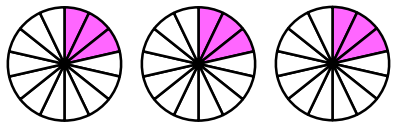
$$\frac{4}{9} \times 2 =$$


- A. $\frac{8}{18}$ B. $\frac{8}{9}$ C. $\frac{4}{18}$



VF

5b. Match the calculation to the correct answer.

$$\frac{3}{14} \times 3 =$$


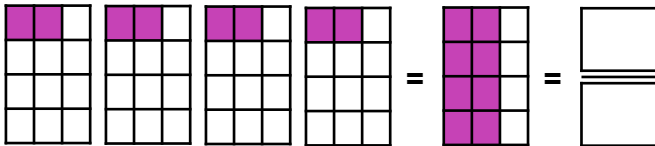
- A. $\frac{3}{42}$ B. $\frac{9}{42}$ C. $\frac{9}{14}$



VF

6a. Solve the calculation below and reduce the answer to its simplest form.

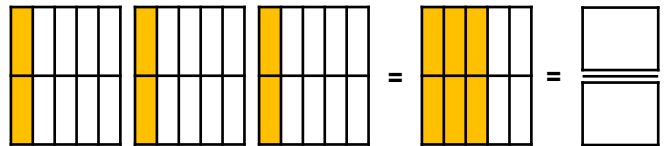
$$\frac{2}{12} \times 4 =$$



VF

6b. Solve the calculation below and reduce the answer to its simplest form.

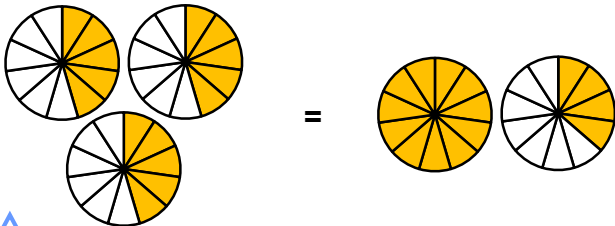
$$\frac{2}{10} \times 3 =$$



VF

7a. True or false?

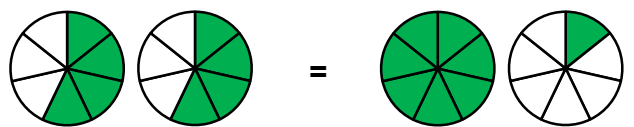
$$\frac{5}{11} \times 3 = \frac{15}{11} = 1 \frac{4}{11}$$



VF

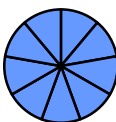
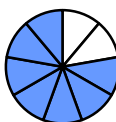
7b. True or false?

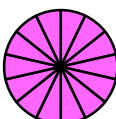
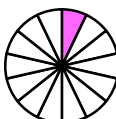
$$\frac{4}{7} \times 2 = \frac{8}{7} = 1 \frac{8}{14}$$



VF

8a. Complete the calculations. Give your answer as a mixed number.

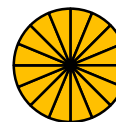

A. $\frac{4}{9} \times \square =$   $= \square$

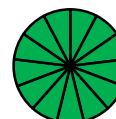

B. $\frac{5}{14} \times \square =$   $= \square$



VF

8b. Complete the calculations. Give your answer as a mixed number.

A. $\frac{7}{16} \times \square =$   $= \square$

B. $\frac{3}{13} \times \square =$   $= \square$



VF

Multiply Non-Unit Fractions by an Integer

Multiply Non-Unit Fractions by an Integer

9a. Match the calculation to the correct answer.

$$\frac{5}{13} \times 3 = \frac{\square}{\square}$$

- A. $1\frac{1}{13}$ B. $1\frac{2}{39}$ C. $1\frac{2}{13}$



VF

9b. Match the calculation to the correct answer.

$$\frac{3}{11} \times 5 = \frac{\square}{\square}$$

- A. $2\frac{4}{11}$ B. $1\frac{4}{11}$ C. $1\frac{1}{11}$



VF

10a. Solve the calculations below and reduce each answer to its simplest form.

A. $\frac{2}{16} \times 2 = \frac{\square}{\square} = \frac{\square}{\square}$

B. $\frac{2}{18} \times 3 = \frac{\square}{\square} = \frac{\square}{\square}$



VF

10b. Solve the calculations below and reduce each answer to its simplest form.

A. $\frac{4}{24} \times 2 = \frac{\square}{\square} = \frac{\square}{\square}$

B. $\frac{3}{14} \times 4 = \frac{\square}{\square} = \frac{\square}{\square}$



VF

11a. True or false?

A. $\frac{6}{16} \times 3 = \frac{18}{16} = 1\frac{2}{16} = 1\frac{1}{8}$

B. $\frac{4}{15} \times 5 = \frac{20}{15} = 2\frac{5}{15} = 2\frac{1}{3}$



VF

11b. True or false?

A. $\frac{4}{18} \times 6 = \frac{24}{18} = 1\frac{6}{18} = 1\frac{1}{2}$

B. $\frac{4}{20} \times 6 = \frac{24}{20} = 1\frac{4}{20} = 1\frac{1}{5}$



VF

12a. Complete the calculations. Give your answer as a mixed number and reduce your answer to its simplest form.

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



VF

12b. Complete the calculations. Give your answer as a mixed number and reduce your answer to its simplest form.

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



VF

Varied Fluency
Multiply Non-Unit Fractions by an Integer

Developing

- 1a. **A**
2a. $\frac{8}{9}$
3a. **False. The answer should be $\frac{10}{13}$.**
4a. **A. 2 B. 6**

Expected

- 5a. **B**
6a. $\frac{2}{3}$
7a. **True**
8a. **A. $1\frac{7}{9}$ B. $1\frac{1}{14}$**

Greater Depth

- 9a. **C**
10a. **A. $\frac{4}{16} = \frac{1}{4}$ B. $\frac{6}{18} = \frac{1}{3}$**
11a. **A. True B. False. The answer is $1\frac{1}{3}$.**
12a. $\frac{20}{8} = 2\frac{4}{8} = 2\frac{1}{2}$

Varied Fluency
Multiply Non-Unit Fractions by an Integer

Developing

- 1b. **C**
2b. $\frac{6}{15}$
3b. **True**
4b. **A. 3 B. 5**

Expected

- 5b. **C**
6b. $\frac{3}{5}$
7b. **False. The answer is $1\frac{1}{7}$.**
8b. **A. $1\frac{5}{16}$ B. $1\frac{2}{13}$**

Greater Depth

- 9b. **B**
10b. **A. $\frac{8}{24} = \frac{1}{3}$ B. $\frac{12}{14} = \frac{6}{7}$**
11b. **A. False. The answer is $1\frac{1}{3}$. B. True**
12b. $\frac{30}{9} = 3\frac{3}{9} = 3\frac{1}{3}$