Varied Fluency
Step 10: Multiply Fractions by Integers

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: (6F3) Compare and order fractions, including fractions > 1
Mathematics Year 6: (6F4) Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions
Mathematics Year 6: (6F5a) Multiply simple pairs of proper fractions, writing the answer in its simplest form [for example, 1/4 x 1/2 = 1/8

Differentiation:

Developing Questions to support multiplying proper fractions and mixed numbers by integers. Pictorial support given for every question.
Expected Questions to support multiplying proper fractions and mixed numbers by integers using times table knowledge. Answers allow for improper fractions and mixed numbers. Includes a mixture of pictorial support and written questions.
Greater Depth Questions to support multiplying proper fractions, improper fractions and mixed numbers by integers. Children create their own pictorial representations. Answers must be a simplified mixed number.

More Year 6 Fractions resources.

Did you like this resource? Don't forget to review it on our website.

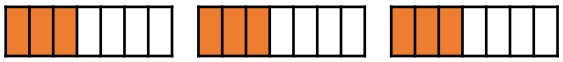
Multiply Fractions by Integers

Multiply Fractions by Integers

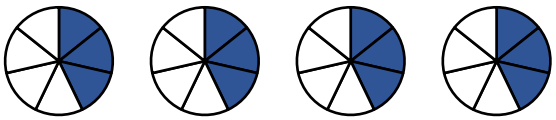
1a. Which set of pictures shows the calculation below?

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

A



B

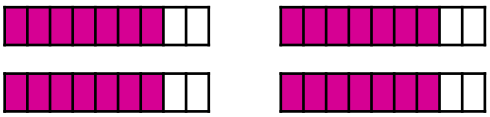


D VF

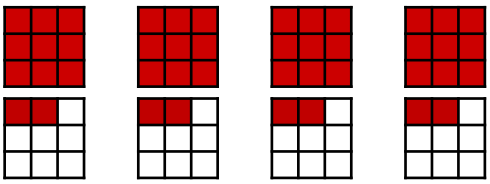
1b. Which set of pictures shows the calculation below?

$$4 \times 1\frac{2}{9}$$

A



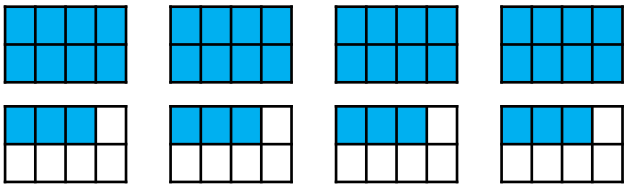
B



D VF

2a. Use the image below to find the answer to the calculation.

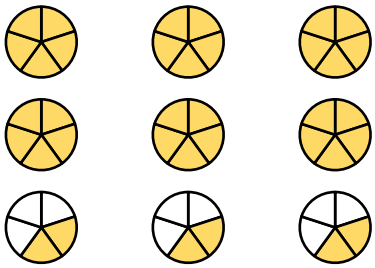
$$1\frac{3}{8} \times 4 = \square$$



D VF

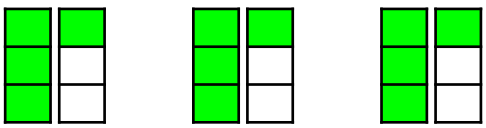
2b. Use the image below to find the answer to the calculation.

$$2\frac{2}{5} \times 5 = \square$$



D VF

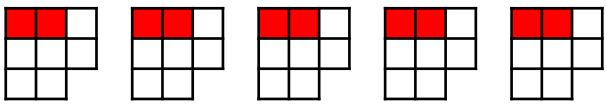
3a. Complete the statement based on the image below.



There are ____ lots of ____ .

D VF

3b. Complete the statement based on the image below.

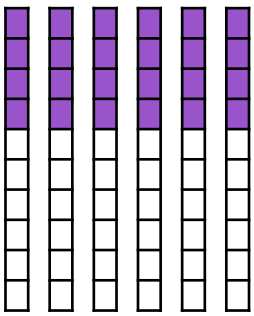


There are ____ lots of ____ .

D VF

4a. True or false?

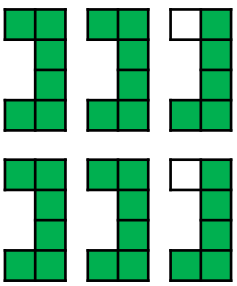
$$6 \times \frac{4}{11} \quad < \quad$$



D VF

4b. True or false?

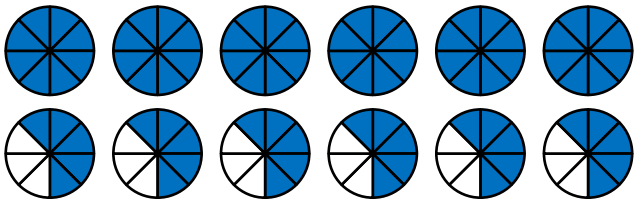
$$2 \times 2\frac{5}{6} \quad = \quad$$



D VF

Multiply Fractions by Integers

5a. Which calculation is represented by the image below?



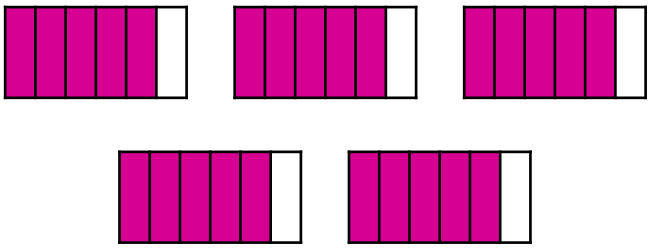
A. $1\frac{5}{8} \times 6$

B. $\frac{5}{8} \times 5$

VF

Multiply Fractions by Integers

5b. Which calculation is represented by the image below?



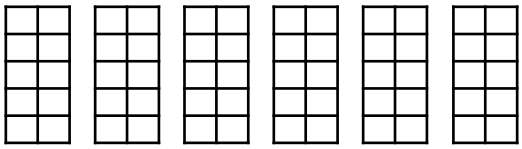
A. $\frac{4}{5} \times 6$

B. $\frac{5}{6} \times 5$

VF

6a. Shade in the image below to find the answer to the calculation.

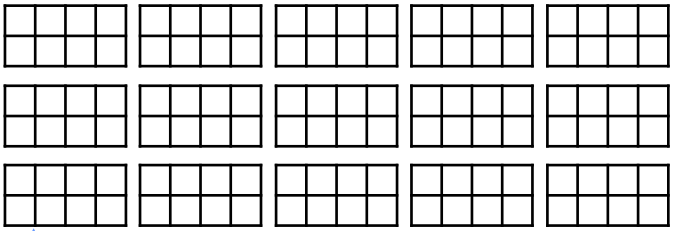
$\frac{6}{10} \times 6 = \square$



VF

6b. Shade in the image below to find the answer to the calculation.

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



VF

7a. Answer the question below.

What are 6 lots of $2\frac{5}{11}$?

VF

7b. Answer the question below.

What are 9 lots of $\frac{12}{13}$?

VF

8a. True or false?

$7 \times 1\frac{4}{9} \quad > \quad 3\frac{5}{6} \times 2$

VF

8b. True or false?

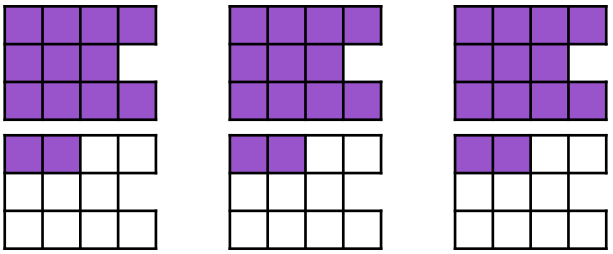
$4 \times 2\frac{7}{8} \quad = \quad \frac{15}{16} \times 11$

VF

Multiply Fractions by Integers

9a. Find and correct the mistake/s in the representation below.

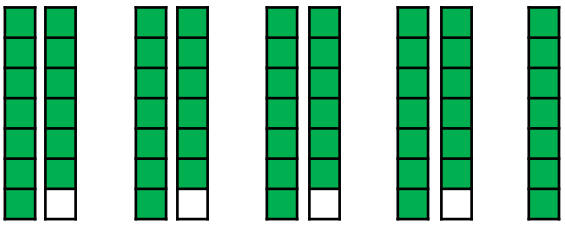
$$3 \times 2\frac{5}{11}$$



GD VF

9b. Find and correct the mistake/s in the representation below.

$$5 \times \frac{13}{7}$$



GD VF

10a. Create an image to find the answer to the calculation.

$$\frac{8}{9} \times 7 = \square$$

GD VF

10b. Create an image to find the answer to the calculation.

$$3\frac{12}{15} \times 4 = \square$$

GD VF

11a. Answer the question below.

What are 8 lots of $2\frac{7}{12}$?

GD VF

11b. Answer the question below.

What are 6 lots of $\frac{9}{11}$?

GD VF

12a. True or false?

$$8 \times 1\frac{5}{13} = \frac{23}{14} \times 7$$

GD VF

12b. True or false?

$$3 \times 5\frac{6}{7} < 3\frac{5}{6} \times 5$$

GD VF

Varied Fluency
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Developing

1a. A

2a. $5\frac{1}{2}$ or $\frac{44}{8}$

3a. There are 3 lots of $1\frac{1}{3}$.

4a. True

Expected

5a. A

6a. $3\frac{3}{5}$ or $\frac{36}{10}$

7a. $14\frac{8}{11}$ or $\frac{162}{11}$

8a. True

Greater Depth

9a. The image represents 3 x $1\frac{2}{11}$. A further set of 3 integers needs to be added and the correct fraction shaded in.

10a. $6\frac{2}{9}$

11a. $20\frac{2}{3}$

12a. False; <

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Developing

1b. B

2b. $7\frac{1}{5}$ or $\frac{36}{5}$

3b. There are 5 lots of $\frac{2}{8}$.

4b. True

Expected

5b. B

6b. $14\frac{3}{8}$ or $\frac{115}{8}$

7b. $8\frac{4}{13}$ or $\frac{108}{13}$

8b. False; >

Greater Depth

9b. The image does not show the final $\frac{6}{7}$ to complete the calculation.

10b. $15\frac{1}{5}$

11b. $4\frac{10}{11}$

12b. True