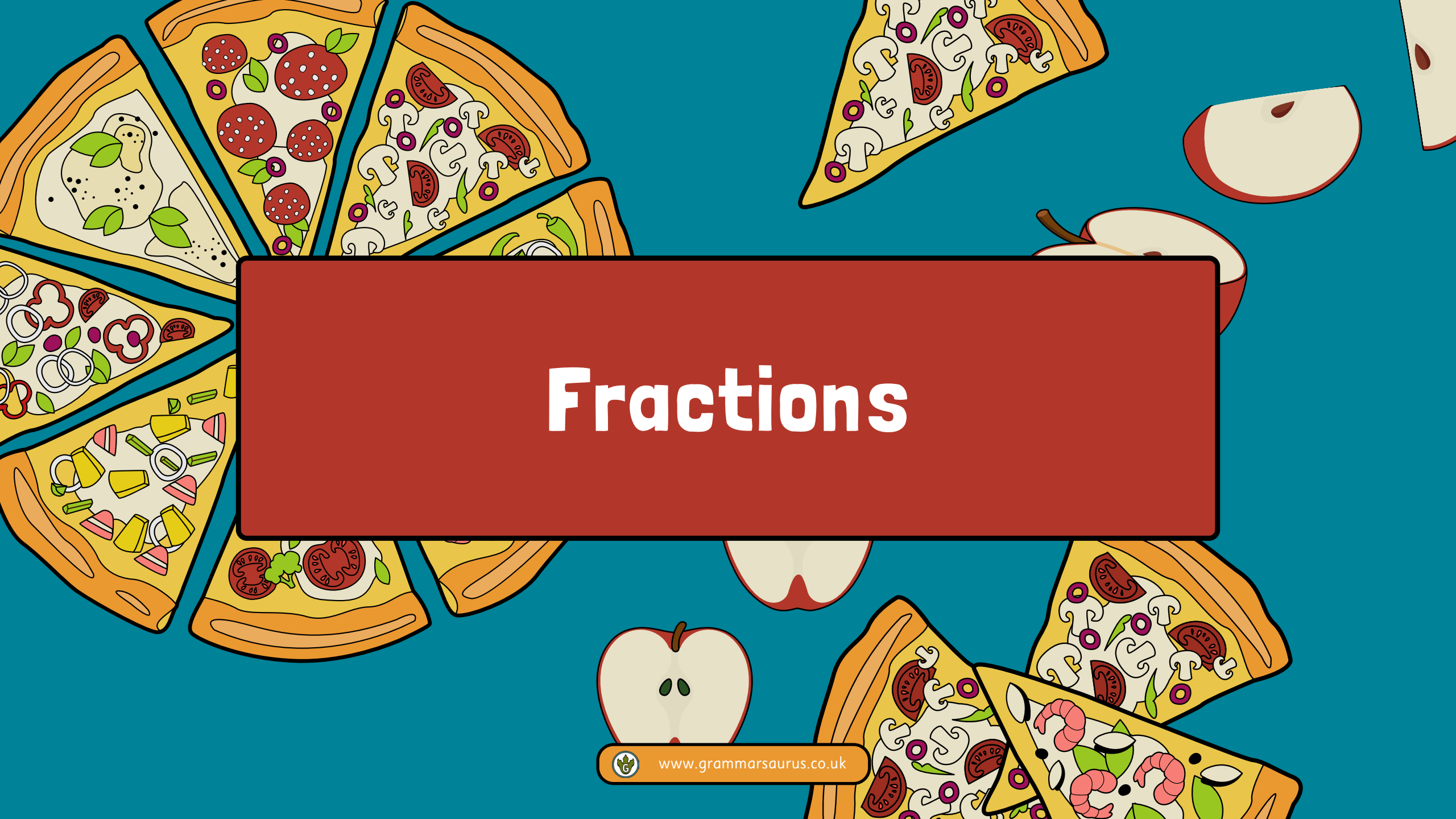
Fractions
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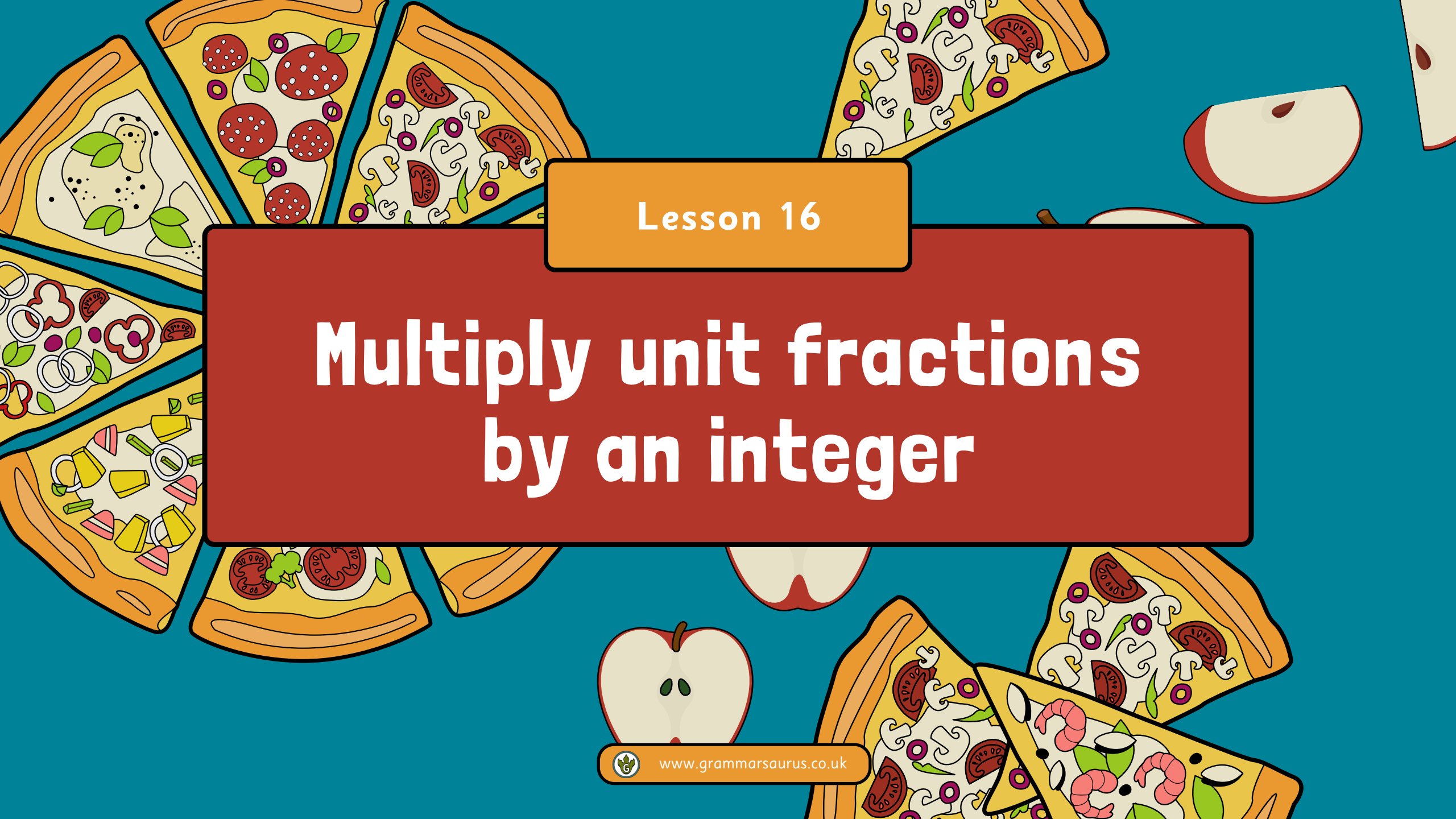
Lesson 16
Multiply unit fractions by an integer
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Starter – subtract fractions

Complete the calculations below.

a)

$$1\frac{3}{10} - \frac{2}{5} = \frac{\square}{\square}$$

b)

$$1\frac{5}{8} - \frac{3}{4} = \frac{\square}{\square}$$

Starter – subtract fractions

Complete the calculations below.

a)

$$1\frac{3}{10} - \frac{2}{5} = \frac{9}{10}$$

b)

$$1\frac{5}{8} - \frac{3}{4} = \frac{7}{8}$$

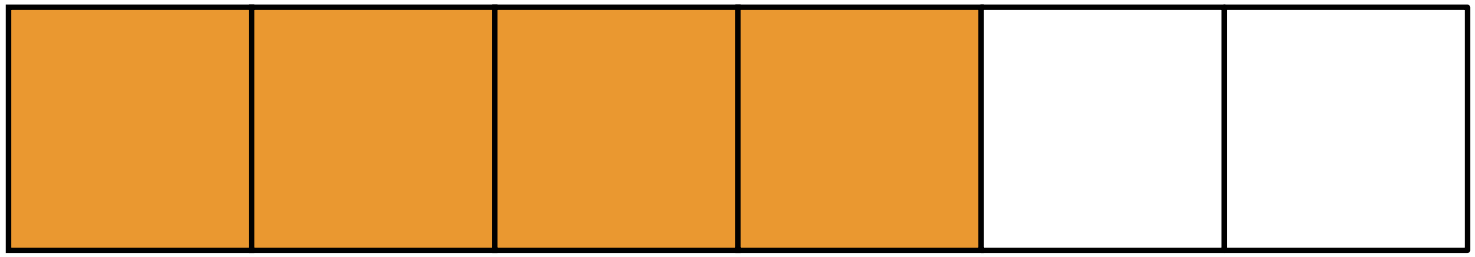
Repeated addition

3 + 3 + 3 + 3 + 3 + 3 + 3 = 21

We could write this addition sum as a multiplication calculation.

7 × 3 = 21

Multiply unit fractions by an integer

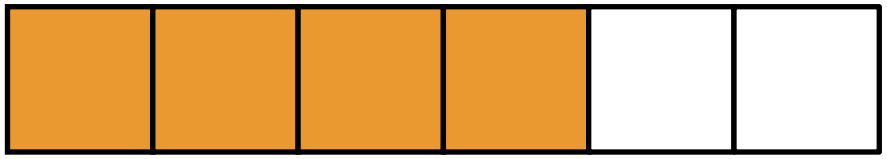


$$\frac{1}{6} + \frac{1}{6} + \frac{1}{6} + \frac{1}{6} = \square$$

How would we write this as a multiplication calculation?

Multiply unit fractions by an integer

answer



$$\frac{1}{6} + \frac{1}{6} + \frac{1}{6} + \frac{1}{6} = \boxed{\frac{4}{6}}$$

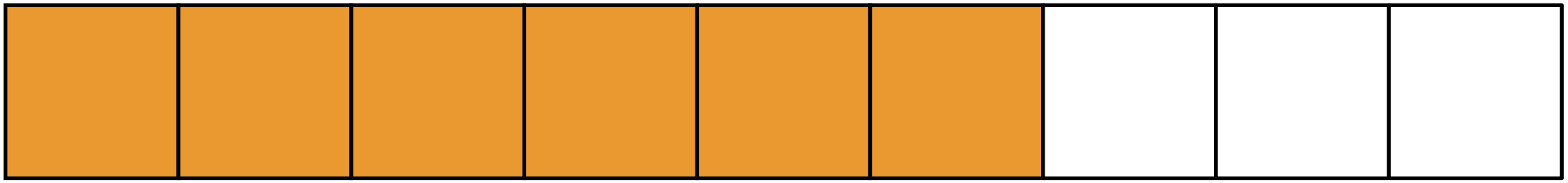
Discuss

What do you notice about the numerator and the denominator when multiplying a whole number?

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

$\frac{1}{6}$ multipled by 4 = $\frac{4}{6}$.

Multiply unit fractions by an integer

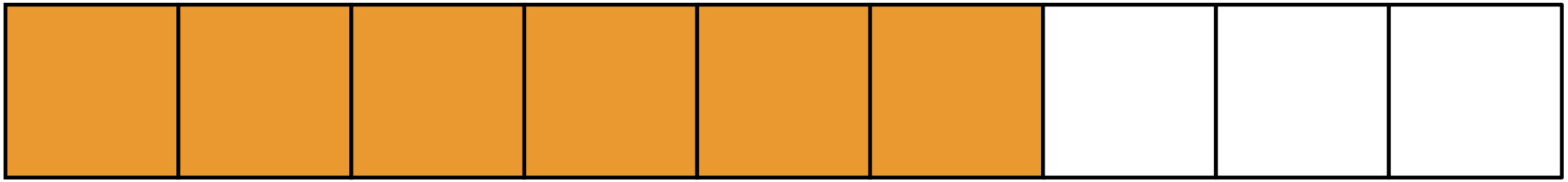


$$\frac{1}{9} + \frac{1}{9} + \frac{1}{9} + \frac{1}{9} + \frac{1}{9} + \frac{1}{9} = \square$$

How would we write this as a multiplication calculation?

Multiply unit fractions by an integer

answer



$$\frac{1}{9} + \frac{1}{9} + \frac{1}{9} + \frac{1}{9} + \frac{1}{9} + \frac{1}{9} = \square$$

$$6 \times \frac{1}{9} = \frac{6}{9}$$

Multiply unit fractions by an integer

Complete these calculations.

a)

$$2 \times \frac{1}{4} = \frac{\square}{\square}$$

b)

$$3 \times \frac{1}{12} = \frac{\square}{\square}$$

Multiply unit fractions by an integer

answers

a)

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

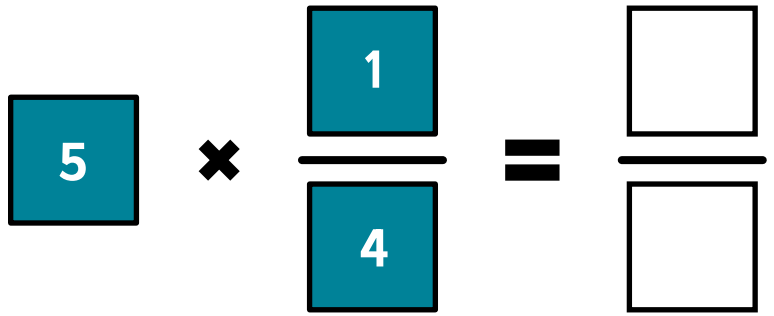
b)

$$3 \times \frac{1}{12} = \frac{3}{12}$$

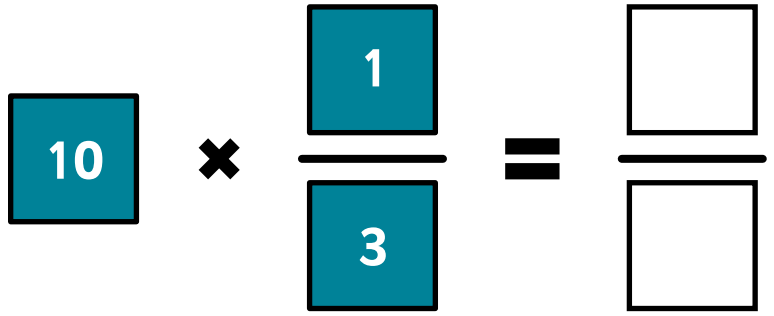
Multiply unit fractions by an integer

What do you notice about these calculations?

a)



b)



Multiply unit fractions by an integer

answers

What do you notice about these calculations?

a)

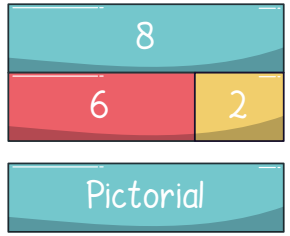
$$5 \times \frac{1}{4} = \frac{5}{4} \qquad 1\frac{1}{4}$$

b)

$$10 \times \frac{1}{3} = \frac{10}{3} \qquad 3\frac{1}{3}$$

Your turn! Try the worksheet.

Multiply unit fractions by an integer



E

1) Use the bar models to complete the calculations below.

a)

$$4 \times \frac{1}{6} = \square$$

b)

$$7 \times \frac{1}{9} = \square$$

c) Write the multiplication calculation for this bar model.

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