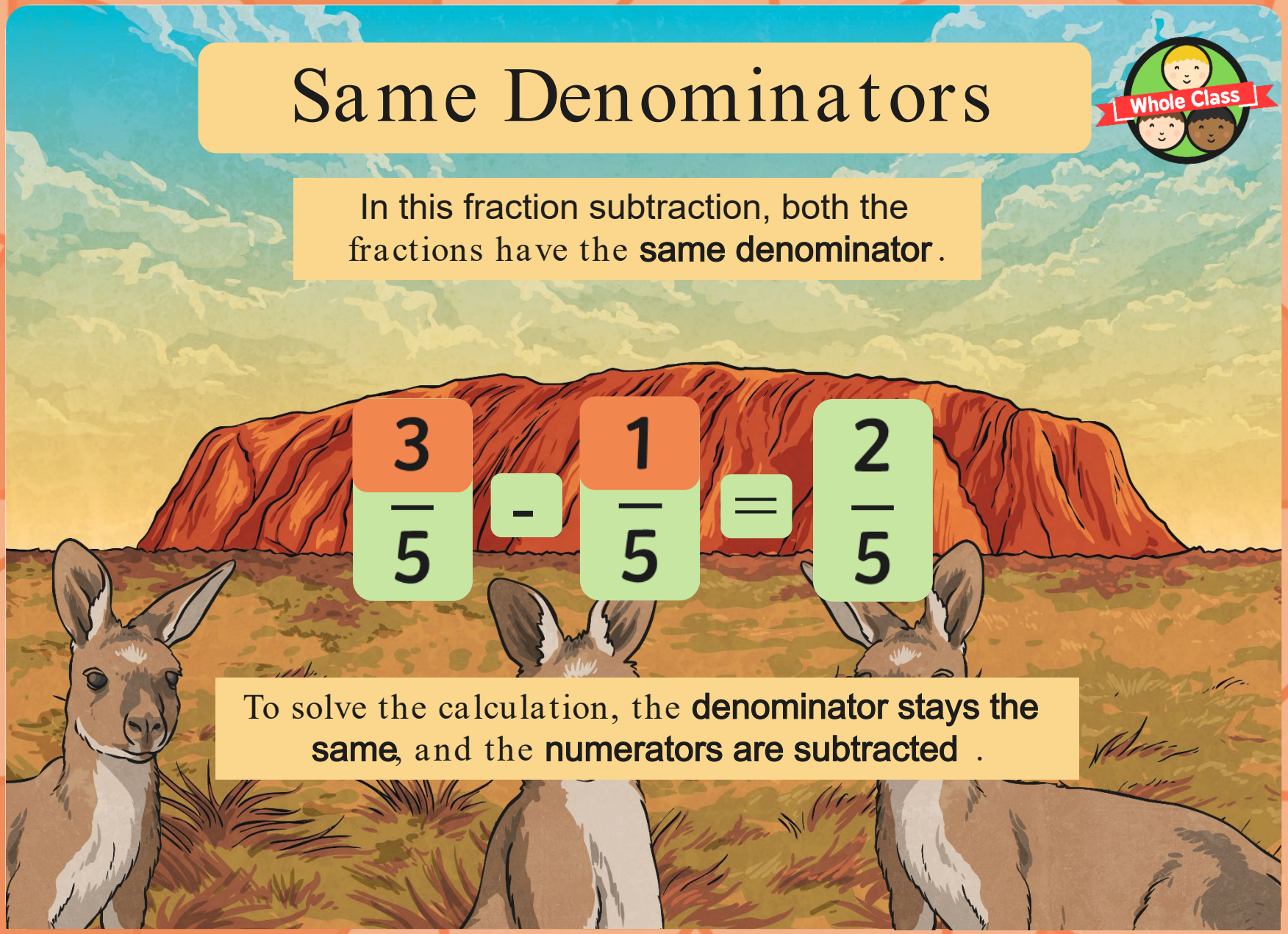
# Subtracting Fraction Multiples

# Same Denominators

Whole Class

In this fraction subtraction, both the fractions have the **same denominator**.




To solve the calculation, the **denominator stays the same**, and the **numerators are subtracted** .

# Same Denominators

Whole Class

In this fraction subtraction, both the fractions have the **same denominator**.

$$\frac{10}{3} - \frac{2}{3} = \frac{8}{3} = 2\frac{2}{3}$$

| | | |
|---|---|---|
| 1 | 4 | 7 |
| 2 | 5 | 8 |
| 3 | 6 | |

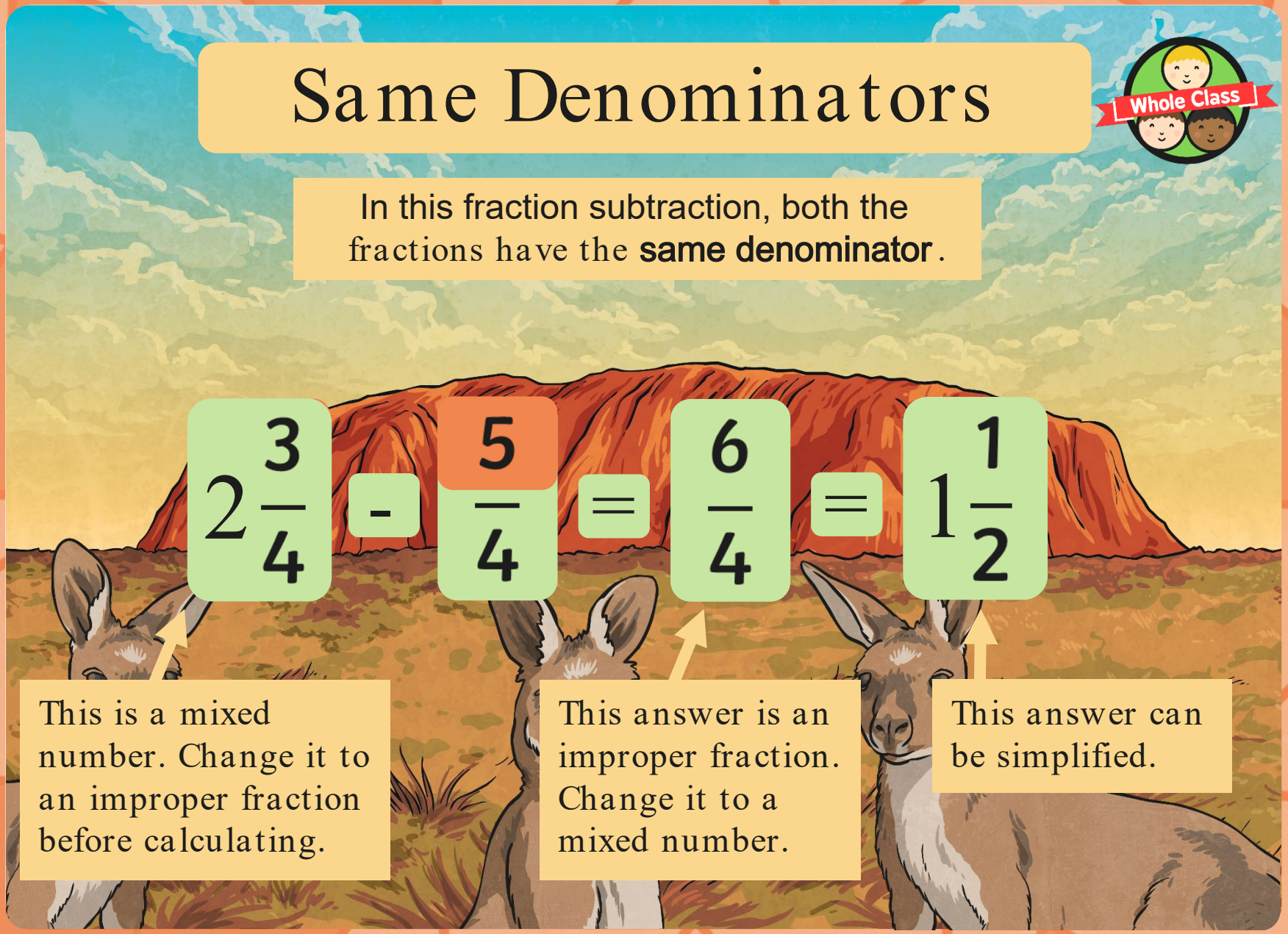
This answer is an improper fraction. Every whole is made of three parts.

This is the same answer written as a mixed number.

# Same Denominators

Whole Class

In this fraction subtraction, both the fractions have the **same denominator**.



# You try…


$$\frac{4}{5} - \frac{2}{5} =$$

$$1\frac{6}{7} - \frac{4}{7} =$$

# You try…


$$\frac{4}{5} - \frac{2}{5} = \frac{2}{5}$$

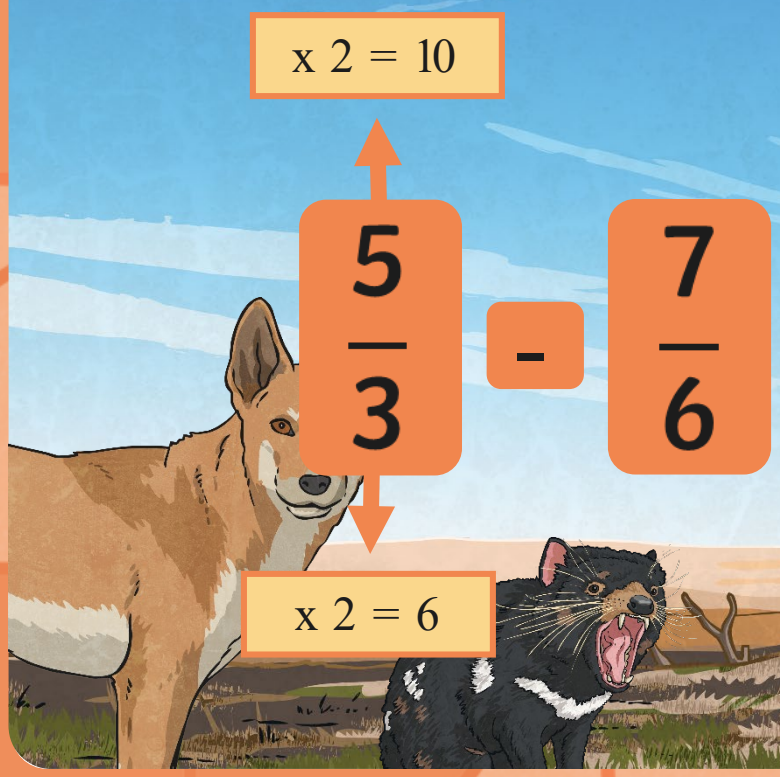
$$1\frac{6}{7} - \frac{4}{7} = \frac{13}{7} - \frac{4}{7} = \frac{9}{7}$$

$$= 1\frac{2}{7}$$

# Denominator Multiples

Whole Class

In this fraction subtraction, both the fractions have **different denominators** which are multiples of the same number.




To solve the calculation, we use **multiplication** to change the fraction with the lowest denominator into an **equivalent fraction** with the same denominator as the other fraction.

**Remember to do the same multiplication to the numerator.**

# Denominator Multiples

Whole Class

Now we have a calculation where both the denominators are the same number.

x 2 = 10

$$\frac{5}{3} - \frac{7}{6} = \frac{10}{6} - \frac{7}{6} = \frac{3}{6} = \frac{1}{2}$$

x 2 = 6

To solve the calculation, the **denominator stays the same**, and the **numerators are subtracted** .

# Denominator Multiples

Whole Class

Let's try this with another calculation where the fractions have **different denominators** which are multiples of the same number.

x 3 = 9

$\frac{3}{4} - \frac{7}{12} = \frac{9}{12} - \frac{7}{12} = \frac{2}{12} = \frac{1}{6}$

x 3 = 12

# Denominator Multiples

Whole Class

Let's try this with another calculation where the fractions have **different denominators** which are multiples of the same number.

x 5 = 25

$\frac{5}{2} - \frac{3}{10} = \frac{25}{10} - \frac{3}{10} = \frac{22}{10} = 2\frac{1}{5}$

x 5 = 10

# You try…

Whole Class

$$\frac{3}{4} - \frac{4}{8} =$$

$$\frac{2}{7} - \frac{1}{14} =$$

# You try…


$$\frac{3}{4} - \frac{4}{8} = \frac{6}{8} - \frac{4}{8} = \frac{2}{8} = \frac{1}{4}$$

÷ 2 = 1

÷ 2 = 4

$$\frac{2}{7} - \frac{1}{14} = \frac{4}{14} - \frac{1}{14} = \frac{3}{14}$$

# Denominator Multiples

Whole Class

Let's try this with another calculation where both the fractions have different denominators.

$\frac{4}{5} - \frac{2}{3} = \frac{12}{15} - \frac{10}{15} = \frac{2}{15}$

$\times 3 = 12$ $\times 5 = 10$

$\times 3 = 15$ $\times 5 = 15$

# Denominator Multiples

Whole Class

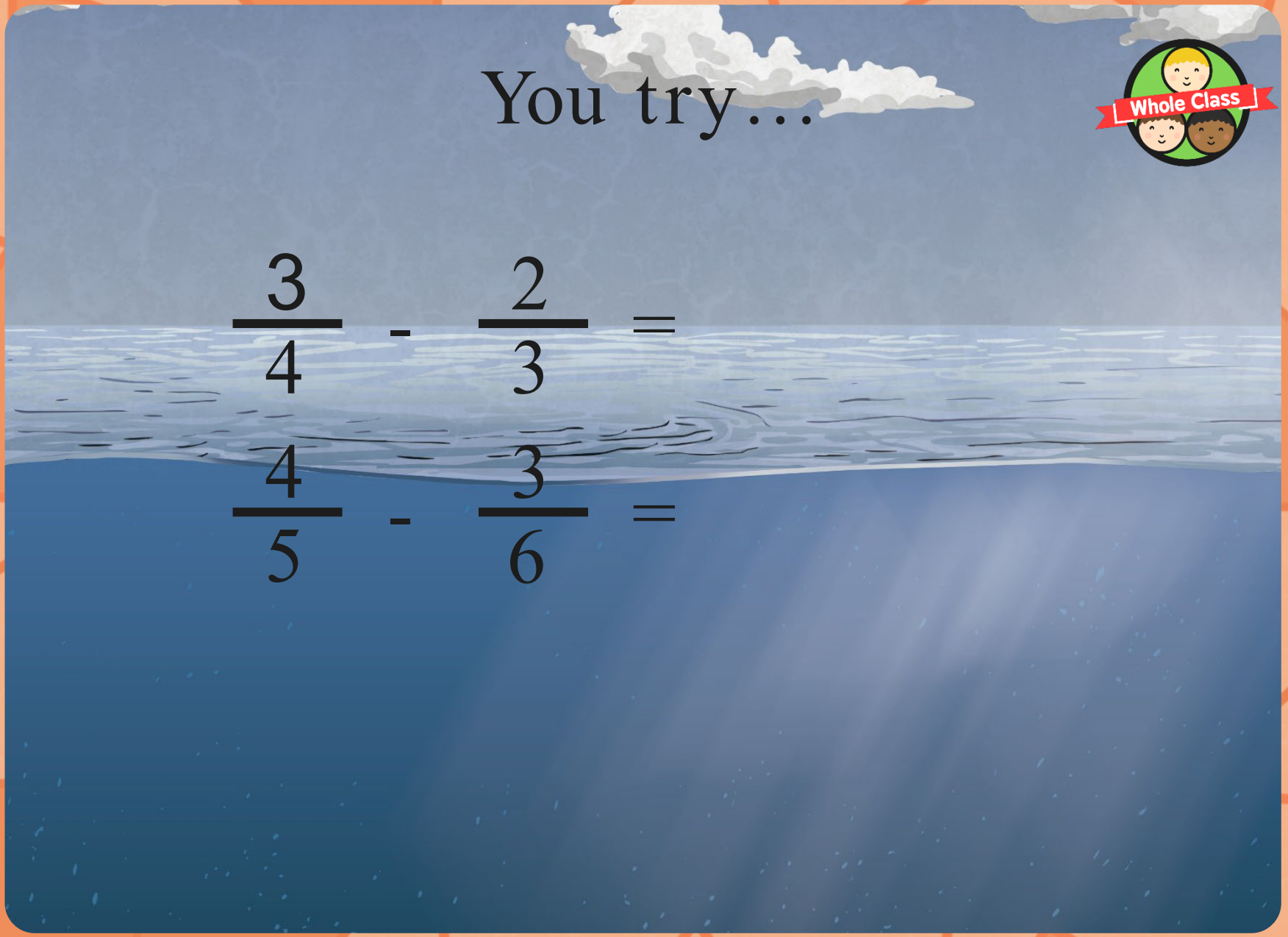
Let's try this with another calculation where both the fractions have different denominators.

$\frac{5}{7} - \frac{2}{5} = \frac{25}{35} - \frac{14}{35} = \frac{11}{35}$

$\times 5 = 25$ $\times 7 = 14$

$\times 5 = 35$ $\times 7 = 35$

# You try…




$$\frac{3}{4} - \frac{2}{3} =$$

$$\frac{4}{5} - \frac{3}{6} =$$

# You try…


$$\frac{3}{4} - \frac{2}{3} = \frac{9}{12} - \frac{8}{12} = \frac{1}{12}$$

$$\frac{4}{5} - \frac{3}{6} = \frac{24}{30} + \frac{15}{30} = \frac{9}{30} = \frac{3}{10}$$

÷ 3 = 3

÷ 3 = 10

# Prove It

Is this calculation correct? Prove it!

$$2\frac{6}{10} - \frac{4}{5} = 1\frac{4}{5}$$

# Prove It

Is this calculation correct? Prove it!

$$2\frac{6}{10} - \frac{4}{5} = 1\frac{4}{5}$$

$$\frac{26}{10} - \frac{8}{10} = \frac{18}{10} = 1\frac{8}{10} = 1\frac{4}{5}$$

# Prove It

Is this calculation correct? Prove it!

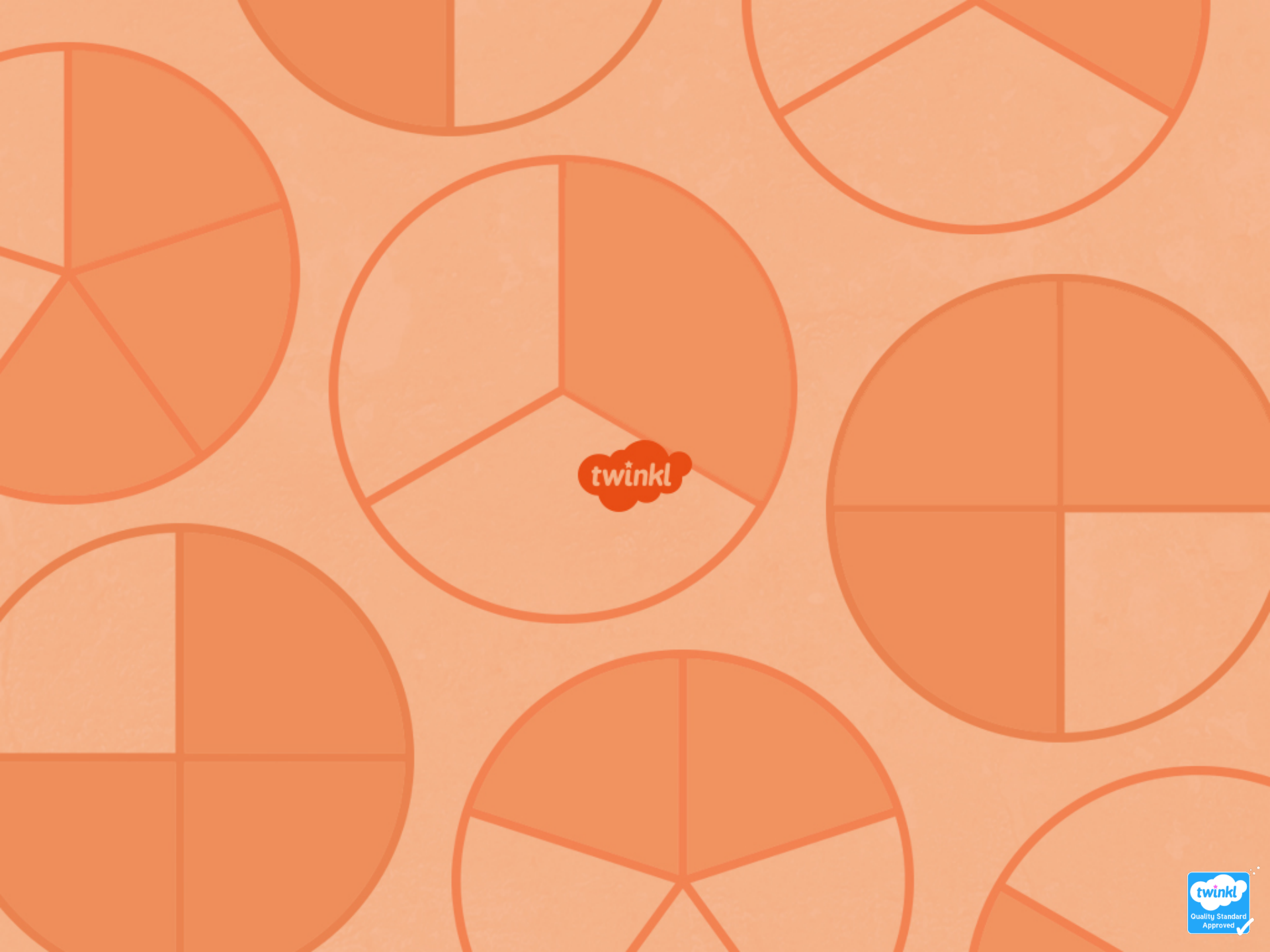
$$2\frac{5}{6} - \frac{2}{3} = 1\frac{4}{6}$$

# Prove It

Is this calculation correct? Prove it!

$$2\frac{5}{6} - \frac{2}{3} = 1\frac{4}{6}$$

$$\frac{17}{6} - \frac{4}{6} = \frac{13}{6} = 2\frac{1}{6}$$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