Lesson 32 NUMBER

Equivalent fractions with fraction strips

WHAT THIS LESSON TEACHES

Two fractions are equivalent when they cover exactly the same length on strips of the same size, even though they use different numbers of parts. Cutting a strip into more, smaller parts does not change how much is shaded.

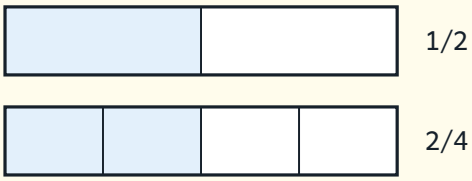
→ One half shades the same length as two quarters.

→ One third shades the same length as two sixths.

MODEL THIS ON THE BOARD

MATCH ½ WITH QUARTERS

1. The top strip is cut into **2** equal parts and **1** part is shaded.
2. The bottom strip is the same length, cut into **4** equal quarters.
3. Shading **2** quarters reaches exactly the same far edge.
4. So the two fractions name the same amount: **1/2** = **2/4**.



DISCUSSION STARTER

REFLECT Can two fractions look different but name the same amount? How did the strips show this?

ANSWER KEY

a) 1/5 = 2/10

b) 3/4 = 6/8

c) 4/10 = 2/5

Q1: 2 eighths

Q2: 2/6

Q3: 4

a) Always — Two quarters reach the same edge as one half, as shown on the strips.

b) Never — More, smaller parts still cover the same length; the amount shaded stays the same.

c) Always — Two sixths reach the same edge as one third on same-size strips.

d) Never — One sixth is a shorter length than one third, so they are not equivalent.

EXTENSION SHEET · STRETCH ANSWERS

S1: 3 (1/2 = 3/6)

S2: 6 (3/4 = 6/8)

S3: 15 (3/4 = 15/20)

S4: 12 (3/4 = 12/16)

S5: 2 (1/10 = 2/20)

Investigation: Same amount, different name — open-ended; scan pupils' working for valid solution paths rather than a single answer.