Lesson 32

Equivalent fractions

MODULE 3 · FRACTIONS, DECIMALS AND PERCENTAGES NUMBER

Two fractions are **equivalent** when they describe the same amount. **Multiply** (or **divide**) the top and bottom by the **same** number to find an equivalent.

→ **1/2 = 2/4 = 4/8 = 5/10** (multiply top and bottom by 2, then by 4, then by 5).

→ **6/9 = 2/3** (divide top and bottom by 3).

FIND THE FRACTION EQUIVALENT TO 2/3 WITH DENOMINATOR 12

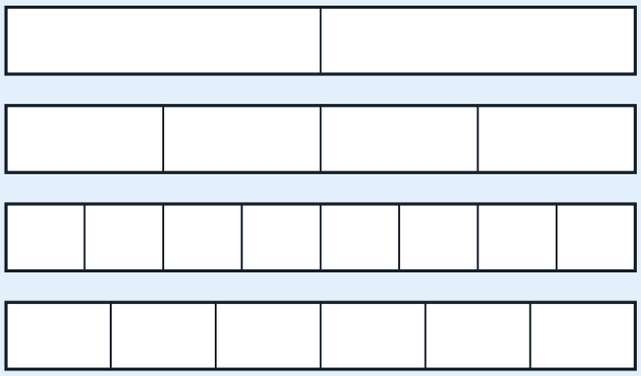
1. Look at the denominators: 3 → 12 means we **multiply by 4**.
2. Whatever you do to the bottom, do to the top: 2 × 4 = **8**.
3. Answer: 2/3 = **8/12**.

HOW TO ANSWER TODAY

- **Equivalent fractions.** Whatever you multiply (or divide) the bottom by, do the same to the top.
  2/5 = ?/15. Bottom × 3, so top × 3 → 6/15
- **Lowest terms.** Divide top and bottom by the same number until you can't go any further.
  12/18 ÷ 6 → 2/3

TRY IT ON THE LINE

Each strip is divided differently. Shade the fraction asked, then find an equivalent fraction with a different denominator.



shade 1/2

shade an equivalent — how many quarters? _____ / 4

shade an equivalent — how many eighths? _____ / 8

shade 2/3 — that's _____ / 6

1. Shade 1/2 on the first strip.
2. Shade the matching amount on the quarters strip (count the cells).
3. Shade the matching amount on the eighths strip.
4. On the bottom strip, shade 2/3 (work out how many of the 6 cells you need).

PRACTICE

1. At Camogie training under the floodlights, the coach says **3/4** of the squad must stay back for extra puck-around drills. There are **20** players at training in total. How many players is that, written as ?/**20**?

   Fill in the missing number: 3/4 = ?/20

2. Taking the roll on Monday morning, the teacher notes that **9/10** of the pupils in 5th class are present. Across the whole school there are **80** pupils, and the same fraction of the whole school is present. How many pupils out of **80** does **9/10** equal?

   Fill in the missing number: 9/10 = ?/80