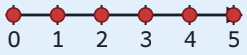
Adding and subtracting mixed numbers

With **mixed numbers**, deal with the whole numbers and the fractions, finding a common denominator for the fraction part. Regroup if the fractions make more than one whole.



→ 2 1/4 + 1 1/2 = 3 + (1/4 + 2/4) = **3 3/4**.
→ 3 1/5 − 1 3/5 → 2 6/5 − 1 3/5 = **1 3/5**.

WORK OUT 2 1/4 + 1 1/2

1. Add the whole numbers: 2 + 1 = 3.
2. Add the fractions with denominator 4: 1/4 + 2/4 = 3/4.
3. Combine: **3 3/4**.

HOW TO ANSWER TODAY

- **Different-bottom fractions.** Bottoms different → make them the same first (common denominator). Then add or subtract the tops.
  1/2 + 1/3 → 3/6 + 2/6 = 5/6

WARM-UP

a. 1/2 + 2/6 = ☐ **b.** 1/2 + 3/4 = ☐ **c.** 2/3 + 8/9 = ☐ **d.** 1/2 + 4/6 = ☐

PRACTICE

1. Before a yard game, Oisín tosses a coin to see who fills the water jugs first. He pours **4 2/5** litres into the jug, then his team uses **1 2/5** litres during the match. How many litres are left in the jug?

2. On the way to Glendalough, the 5th class bus stops for a break. Oisín drinks **1/2** of a bottle of water, then opens a second bottle and drinks **4/5** of that one. How many bottles of water has he drunk in total?

CHALLENGE

1. 5th class baked trays of fudge for the Christmas hamper raffle. They started with **4 3/4** trays of fudge in the staffroom fridge, and sold **2 7/16** trays at the raffle stall on Friday. How many trays of fudge are left?

2. At Camogie training under the floodlights, the coach has set out a long warm-up lap around the pitch. Saoirse jogs **9/12** of the lap, then walks back **2/7** of the lap to fetch her water bottle. How far around the lap is she now?