Fractions of amounts: flowchart

Fractions · Planner week 6 · Whole or part? Follow the arrows to find out

A fraction of an amount

Have you been given the WHOLE or a PART?
Does the number match the denominator or the numerator?

WHOLE

PART

WHOLE given: ÷ bottom, × top

A school has 720 students. $\frac{3}{8}$ of them walk to school. How many walk?

720 students

90	90	90	90	90	90	90	90

3 parts = 270

1. **Divide** by the denominator: 720 ÷ 8 = 90
2. **Multiply** by the numerator: 90 × 3 = **270**

✓ 270 + 5 × 90 = 720

PART given: ÷ top, × bottom

$\frac{3}{8}$ of the students walk. 270 students walk. How many students are there?

270 = 3 parts

90	90	90	90	90	90	90	90

8 parts = ?

1. **Divide** by the numerator: 270 ÷ 3 = 90
2. **Multiply** by the denominator: 90 × 8 = **720**

✓ $\frac{3}{8}$ of 720 = 270

Does it ask for the rest?
how many do not …

No → **Done**
write the units

Yes

Subtract from the whole
720 − 270 = **450** students do not walk

The big question

Have I been given the **WHOLE** or a **PART**?

Whole: ÷ bottom, × top.
Part: ÷ top, × bottom.

Both: see the Writing and simplifying fractions sheet.

Watch out

- Dividing by the numerator instead of the denominator.
- Forgetting "the rest" in a question with more than one step.
- Sense check: a part is always **smaller** than the whole.
- Non-calculator? Use the bar model to see the parts.