

Adding and subtracting fractions

Two-step problems



What is a two-step problem?

Just how
it sounds



Two-step problem

- Solve the problem in the first step
- Solve the problem in the second step
- Now, you're done

Here's an example





Grandmother told the girls to gather
wild rice from the lake shore



The first granddaughter gathers rice from $\frac{4}{7}$ of the shore

The second granddaughter gathers rice from $\frac{2}{7}$ of the shore

How much of the shore is left?

What is the first step?

Figure out
how much was
already gathered





I gathered $\frac{4}{7}$
of the rice





I gathered $\frac{4}{7}$
of the rice



I gathered $\frac{2}{7}$
of the rice



STEP ONE

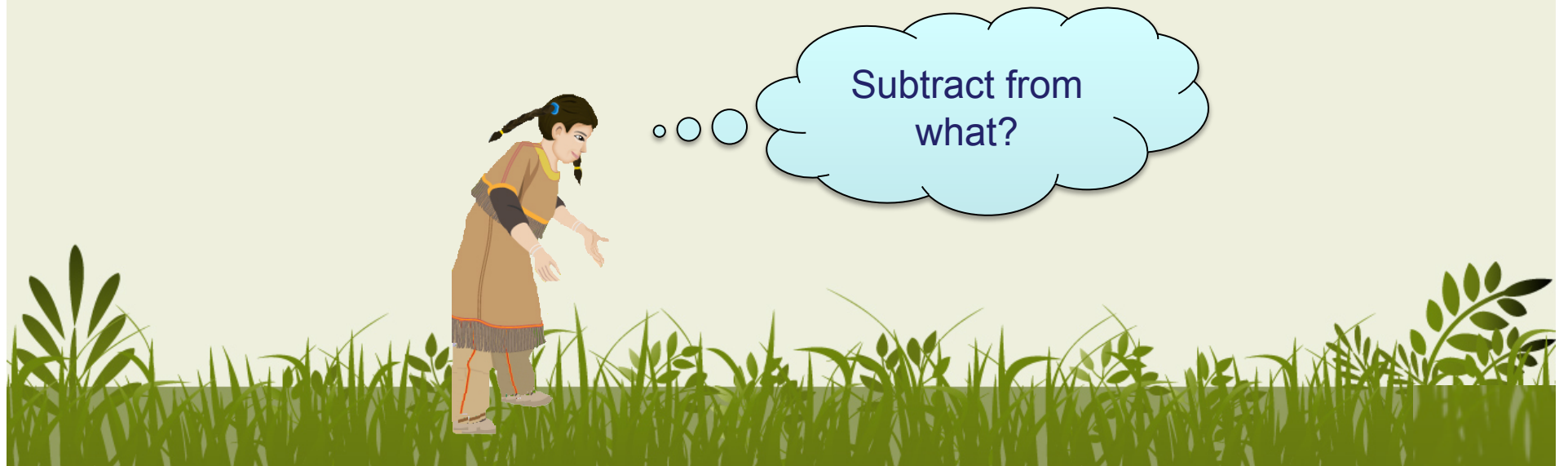
$$\frac{4}{7} + \frac{2}{7} = \frac{6}{7}$$

This is how much rice was
gathered already




Step two

Subtract




Step two

Subtract



Subtract from
what?



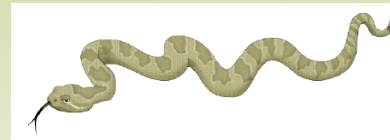
Subtract from
the whole



This can be a tiny bit tricky

You have gathered rice from this fraction

$$\frac{6}{7}$$



You subtract from the whole. A whole of anything – a whole lake shore, a whole pot of stew, a whole snake, a whole anything is 1.



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

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



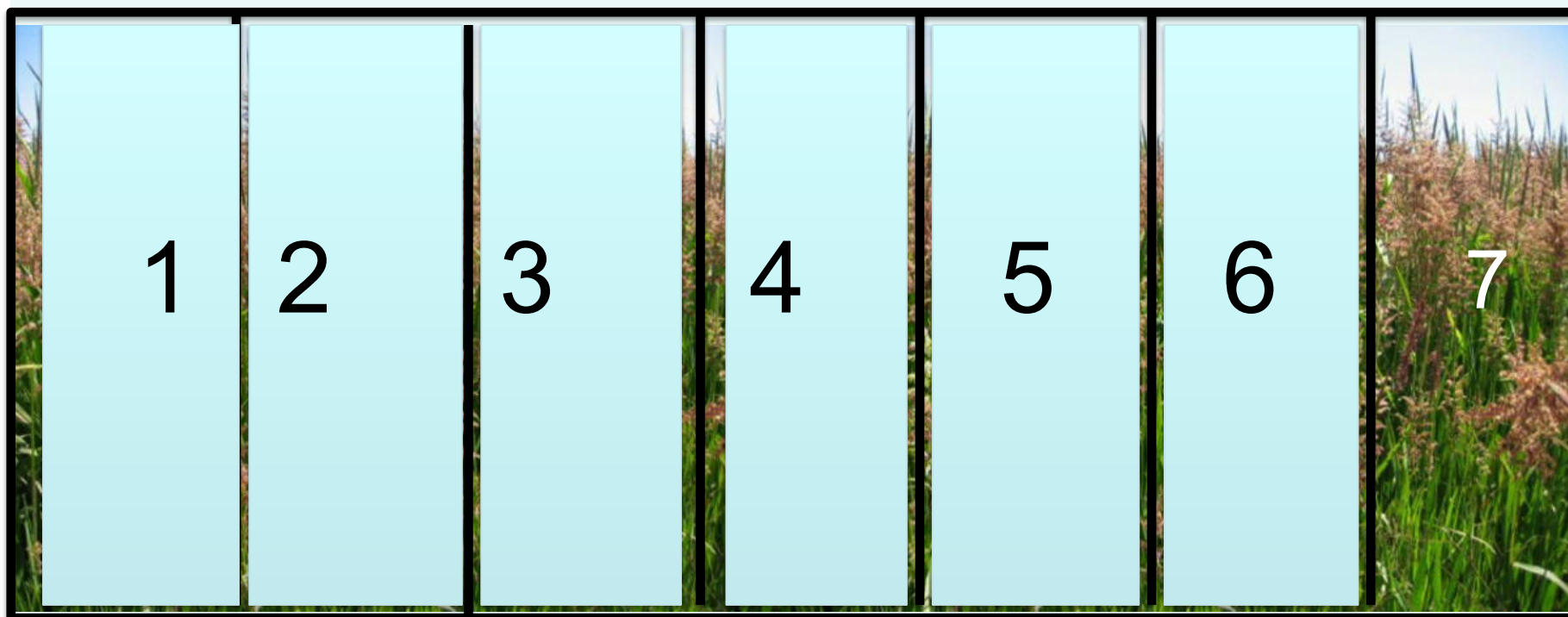


You could just
count how
many pieces

$$\frac{1}{7}$$



and then see
how many
pieces are left





That works IF
you have a
model

$$\frac{1}{7}$$



What if you
don't?

1

2

3

4

5

6

7

If you don't have a model

1. Add up the different fractions to find the total amount you have gathered
2. Subtract the answer you found in step one from 1
 - Hint: You might find it easier to change 1 to a fraction like $\frac{7}{7}$

