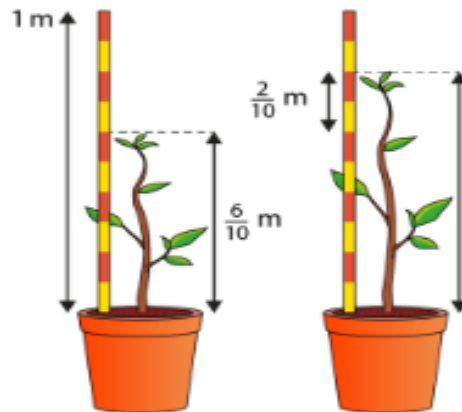# Adding and Subtracting Fractions

1)

We grow a plant in a pot.

Week 1 the plant is $\frac{6}{10}$ of a metre.
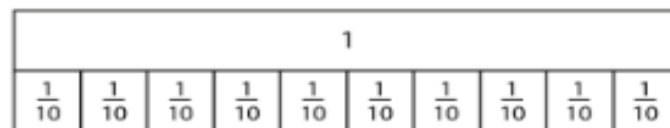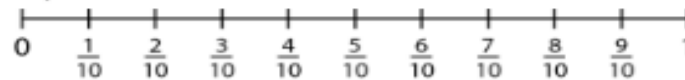
Week 2 the plant has grown $\frac{2}{10}$ of a metre.

How tall is it now?

$$\frac{6}{10} + \frac{2}{10} = \frac{}{}$$

Representations:

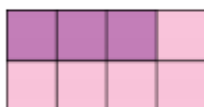**2)**

True or False?

a) $\frac{1}{2} + \frac{1}{2} = \frac{2}{4}$

b) $\frac{2}{9} + \frac{6}{9} = \frac{8}{18}$

c) $\frac{3}{8} + \frac{5}{8} = 1$

d) $\frac{1}{11} + \frac{3}{11} + \frac{5}{11} = \frac{9}{11}$

How do you know?

3)

How many different ways can you complete this equation?

$$\frac{\square}{9} + \frac{\square}{9} = \frac{1}{9} + \frac{2}{9} + \frac{3}{9} + \frac{2}{9} + \frac{1}{9}$$

4)

Complete these equations:

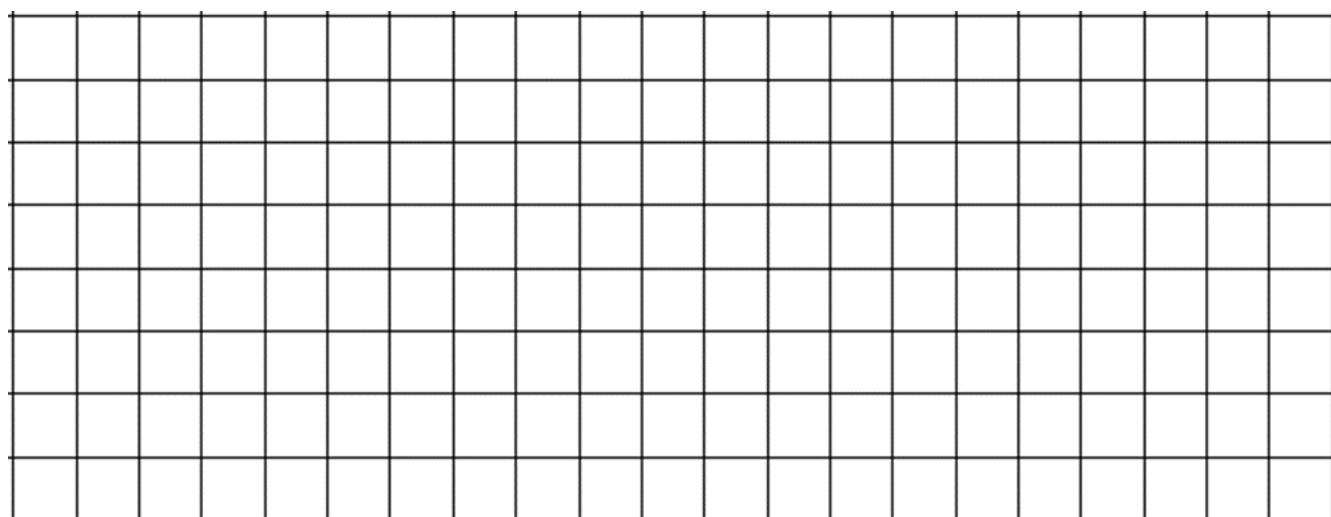$$\frac{\square}{11} + \frac{5}{\square} + \frac{2}{11} = \frac{8}{11}$$

5)

This is the answer.

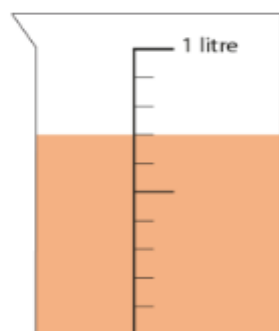What fractions could have been added together to get this answer?

Find three combinations.

6)

Sofia had a jug with $\frac{7}{10}$ litres of juice.

She drank $\frac{3}{10}$ litres.

How much does she have left?

— 1 litre

Prove it.

7)

Fill in the missing numbers from these problems:

$$\frac{4}{11} + \frac{\square}{\square} = \frac{10}{11}$$

$$\frac{3}{8} + \frac{\square}{\square} = \frac{7}{8}$$

$$\frac{10}{11} - \frac{\square}{\square} = \frac{4}{11}$$

$$\frac{\square}{\square} - \frac{\square}{\square} = \frac{3}{8}$$

$$\frac{15}{16} = \frac{\square}{\square} + \frac{7}{16}$$

$$\frac{\square}{\square} + \frac{9}{25} = \frac{23}{25}$$

$$\frac{15}{16} - \frac{\square}{\square} = \frac{7}{16}$$

$$\frac{23}{25} - \frac{\square}{\square} = \frac{9}{25}$$

Create some of your own fraction addition and subtractions in your Unexpected Adventure Trail and use the STEM sentences to explain them.

8)

Find the fraction to complete the addition calculation:

A.

$$\frac{2}{10} + \frac{2}{5} =$$

B.

$$\frac{1}{3} + \frac{3}{6} =$$

C.

$$\frac{4}{8} + \frac{2}{4} =$$

D.

$$\frac{1}{2} + \frac{2}{8} =$$

Show how you found the common denominator, and added the two fractions to find the answer.