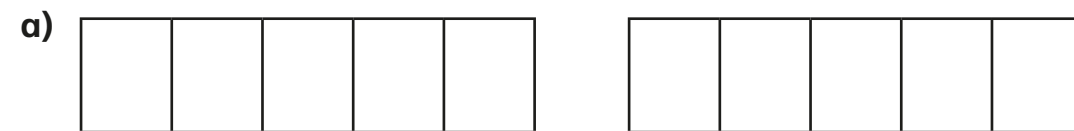


# Add and subtract fractions

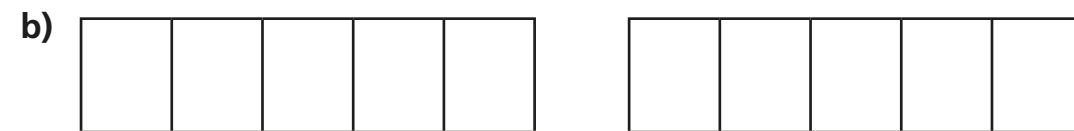


1 Complete the calculations.

Use the bar models to help you.



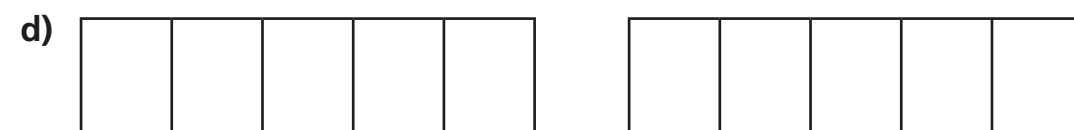
$$\frac{4}{5} + \frac{3}{5} = \boxed{\phantom{00}} = \boxed{\phantom{00}}$$



$$\frac{6}{5} + \frac{3}{5} = \boxed{\phantom{00}} = \boxed{\phantom{00}}$$



$$\frac{8}{5} - \frac{6}{5} = \boxed{\phantom{00}}$$



$$\frac{9}{5} - \frac{3}{5} = \boxed{\phantom{00}} = \boxed{\phantom{00}}$$

2 Complete the calculations.

a)  $\frac{4}{7} + \frac{2}{7} = \boxed{\phantom{00}}$

f)  $\frac{17}{9} - \frac{8}{9} = \boxed{\phantom{00}} = \boxed{\phantom{00}}$

b)  $\frac{4}{7} + \frac{3}{7} = \boxed{\phantom{00}} = \boxed{\phantom{00}}$

g)  $\frac{16}{9} - \frac{8}{9} = \boxed{\phantom{00}}$

c)  $\frac{4}{7} + \frac{4}{7} = \boxed{\phantom{00}} = \boxed{\phantom{00}}$

h)  $\frac{7}{9} + \frac{2}{9} + \frac{8}{9} = \boxed{\phantom{00}} = \boxed{\phantom{00}}$

d)  $\frac{8}{7} - \frac{3}{7} = \boxed{\phantom{00}}$

i)  $\frac{7}{15} + \frac{2}{15} + \frac{8}{15} = \boxed{\phantom{00}} = \boxed{\phantom{00}}$

e)  $\frac{7}{9} + \frac{8}{9} = \boxed{\phantom{00}} = \boxed{\phantom{00}}$

j)  $\frac{7}{15} - \frac{2}{15} + \frac{8}{15} = \boxed{\phantom{00}}$

3

$$\frac{\boxed{\phantom{00}}}{8} + \frac{\boxed{\phantom{00}}}{8} = \frac{13}{8}$$

What could the missing numerators be?

Give six different possibilities.

$$\frac{\boxed{\phantom{00}}}{8} + \frac{\boxed{\phantom{00}}}{8} = \frac{13}{8}$$

$$\frac{\boxed{\phantom{00}}}{8} + \frac{\boxed{\phantom{00}}}{8} = \frac{13}{8}$$

$$\frac{\boxed{\phantom{00}}}{8} + \frac{\boxed{\phantom{00}}}{8} = \frac{13}{8}$$

$$\frac{\boxed{\phantom{00}}}{8} + \frac{\boxed{\phantom{00}}}{8} = \frac{13}{8}$$

$$\frac{\boxed{\phantom{00}}}{8} + \frac{\boxed{\phantom{00}}}{8} = \frac{13}{8}$$

$$\frac{\boxed{\phantom{00}}}{8} + \frac{\boxed{\phantom{00}}}{8} = \frac{13}{8}$$



- 4 Dora has  $2\frac{3}{8}$  litres of juice.

She pours out  $\frac{9}{8}$  litres of juice.

How many litres of juice does she have left?

Dora has  litres left.

- 5 Fill in the missing numerators.

a)  $\frac{3}{8} + \frac{\boxed{\phantom{000}}}{8} = \frac{13}{8}$

b)  $\frac{13}{8} - \frac{\boxed{\phantom{000}}}{8} = \frac{7}{8}$

c)  $\frac{13}{8} - \frac{\boxed{\phantom{000}}}{8} = 1$

d)  $\frac{11}{9} + \frac{\boxed{\phantom{000}}}{9} = \frac{22}{9} = 2\frac{\boxed{\phantom{000}}}{9}$

e)  $\frac{11}{9} + \frac{\boxed{\phantom{000}}}{9} = \frac{\boxed{\phantom{000}}}{9} = 2\frac{2}{9}$

f)  $\frac{22}{9} - \frac{\boxed{\phantom{000}}}{9} = \frac{\boxed{\phantom{000}}}{9} = 2\frac{2}{9}$

g)  $\frac{4}{7} + \frac{\boxed{\phantom{000}}}{7} + \frac{4}{7} = 2$

h)  $\frac{5}{7} + \frac{\boxed{\phantom{000}}}{7} + \frac{5}{7} = 2$

i)  $\frac{6}{7} + \frac{\boxed{\phantom{000}}}{7} + \frac{6}{7} = 2$

j)  $\frac{14}{7} + \frac{\boxed{\phantom{000}}}{7} + \frac{4}{7} = 3$

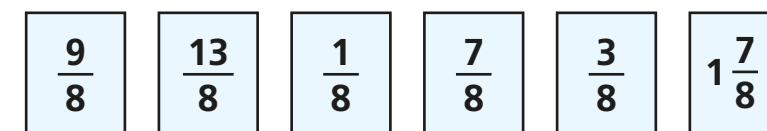
k)  $\frac{15}{7} + \frac{\boxed{\phantom{000}}}{7} + \frac{5}{7} = 3$

l)  $\frac{16}{7} + \frac{\boxed{\phantom{000}}}{7} + \frac{6}{7} = 4$

Compare answers with a partner. What do you notice?



- 6 Here are some fraction cards.



Use the cards to write pairs of fractions with a total of 2

+  = 2

+  = 2

+  = 2

- 7 Annie and Dexter both have a skipping rope.

Annie's rope is  $\frac{3}{4}$  m shorter than Dexter's rope.

The ropes are  $\frac{13}{4}$  m altogether.

How long is each skipping rope?

Annie's rope is  m long.

Dexter's rope is  m long.

