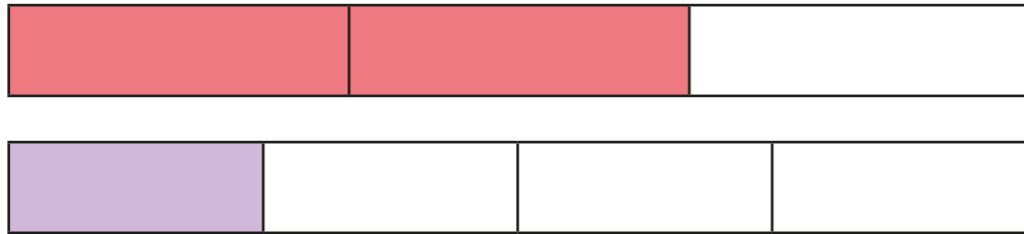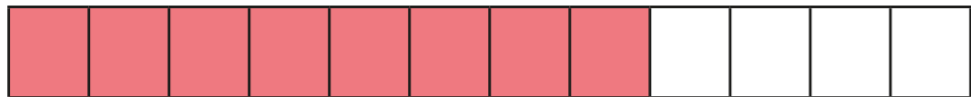# Add and subtract fractions (2)

1 Amir is using fraction strips to work out $\frac{2}{3} + \frac{1}{4}$

Amir says he needs to find a common denominator.

a) Complete Amir's method.

$\frac{2}{3} = \frac{\square}{12}$

$\frac{1}{4} = \frac{\square}{12}$

$\frac{2}{3} + \frac{1}{4} = \frac{\square}{12} + \frac{\square}{12} = \frac{\square}{12}$

b) Show the addition on the fraction strip.

c) Could you have used a different denominator?

2 What common denominator can you use to add the fractions?

a) $\frac{2}{5} + \frac{1}{2}$ Common denominator = ☐

b) $\frac{2}{3} + \frac{4}{5}$ Common denominator = ☐

c) $\frac{7}{8} - \frac{1}{4}$ Common denominator = ☐

d) $\frac{7}{9} - \frac{1}{6}$ Common denominator = ☐

e) $\frac{11}{15} + \frac{3}{10}$ Common denominator = ☐

3 Ron and Eva are working out $\frac{1}{4} + \frac{5}{6}$

Ron's method

$\frac{1}{4} + \frac{5}{6} = \frac{3}{12} + \frac{10}{12} = \frac{13}{12}$

Eva's method

$\frac{1}{4} + \frac{5}{6} = \frac{6}{24} + \frac{20}{24} = \frac{26}{24}$

a) What is the same about Ron's and Eva's methods?

b) What is different about their methods?

c) Which method do you prefer? Why?

4 Complete the calculations.
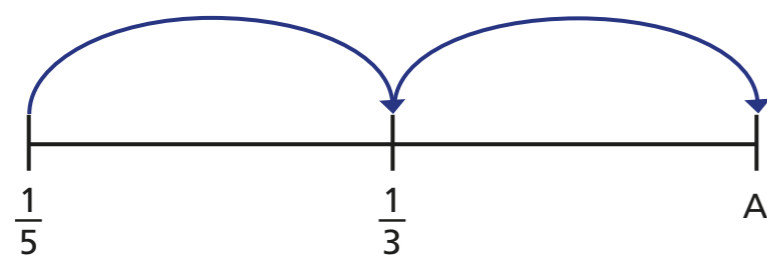
a) $\dfrac{1}{5} + \dfrac{3}{4} = \boxed{}$

c) $\dfrac{1}{2} - \dfrac{1}{7} = \boxed{}$

b) $\dfrac{7}{8} - \dfrac{1}{3} = \boxed{}$

d) $\dfrac{11}{18} + \dfrac{7}{12} = \boxed{}$

5 Mo is drawing jumps on a number line.

The jumps are the same size.

$\dfrac{1}{5} \qquad \dfrac{1}{3} \qquad A$

a) What is the size of the jump?

$\boxed{}$

b) What is the value of A?

$\boxed{}$

6 Complete the bar model.

$\dfrac{5}{18}$	$\dfrac{1}{6}$	$\dfrac{5}{9}$
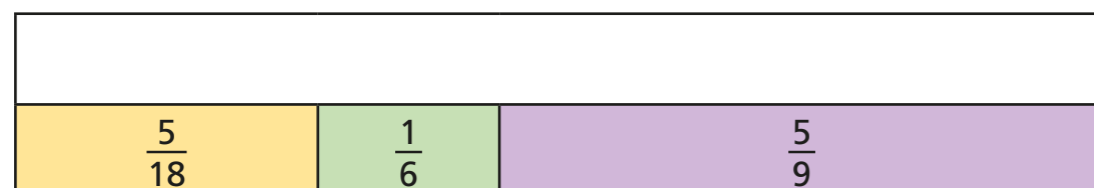
7 Complete the additions.

Give your answers as mixed numbers and as improper fractions.

a) $\dfrac{4}{5} + \dfrac{5}{4} = \boxed{} = \boxed{}$

c) $\dfrac{9}{8} + \dfrac{8}{9} = \boxed{} = \boxed{}$

b) $\dfrac{2}{3} + \dfrac{3}{2} = \boxed{} = \boxed{}$

d) $\boxed{} = \boxed{} = \dfrac{5}{3} + \dfrac{3}{5}$

What patterns do you notice?

8 Look at these additions.

$\dfrac{1}{2} + \dfrac{1}{3} = \boxed{}$

$\dfrac{1}{2} + \dfrac{1}{3} + \dfrac{1}{4} = \boxed{}$

$\dfrac{1}{2} + \dfrac{1}{3} + \dfrac{1}{4} + \dfrac{1}{5} = \boxed{}$

a) When does this pattern first give an answer greater than 2?

_____

_____

b) Do you think the pattern will ever give an answer greater than 100?