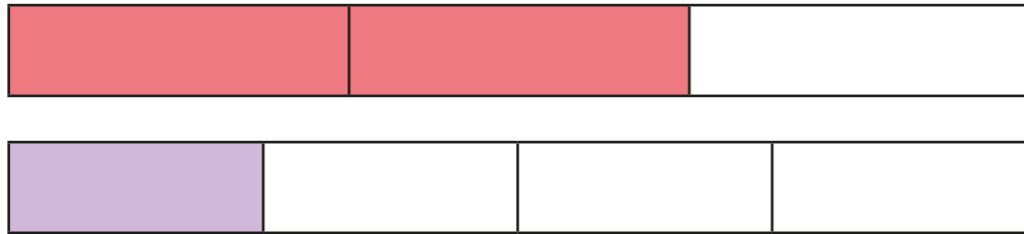


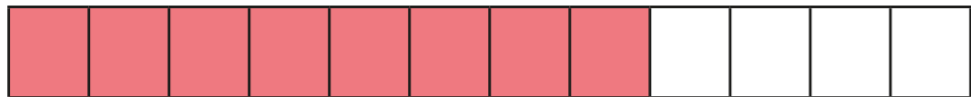
# Add and subtract fractions (2)

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?

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b) What is different about their methods?

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c) Which method do you prefer? Why?





4 Complete the calculations.

a)  $\frac{1}{5} + \frac{3}{4} =$

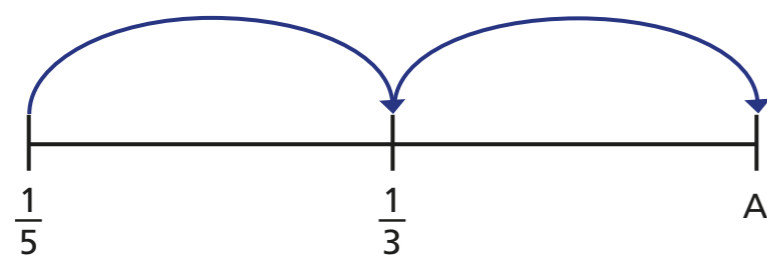
c)  $\frac{1}{2} - \frac{1}{7} =$

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

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

5 Mo is drawing jumps on a number line.

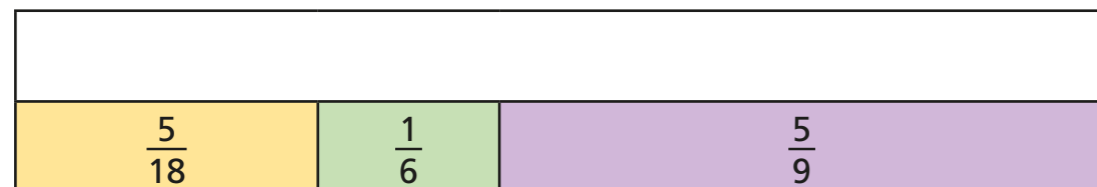
The jumps are the same size.



a) What is the size of the jump?

b) What is the value of A?

6 Complete the bar model.



7 Complete the additions.

Give your answers as mixed numbers and as improper fractions.

a)  $\frac{4}{5} + \frac{5}{4} =$    $=$

c)  $\frac{9}{8} + \frac{8}{9} =$    $=$

b)  $\frac{2}{3} + \frac{3}{2} =$    $=$

d)   $=$    $= \frac{5}{3} + \frac{3}{5}$

What patterns do you notice?

8 Look at these additions.

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

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

$\frac{1}{2} + \frac{1}{3} + \frac{1}{4} + \frac{1}{5} =$

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

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

