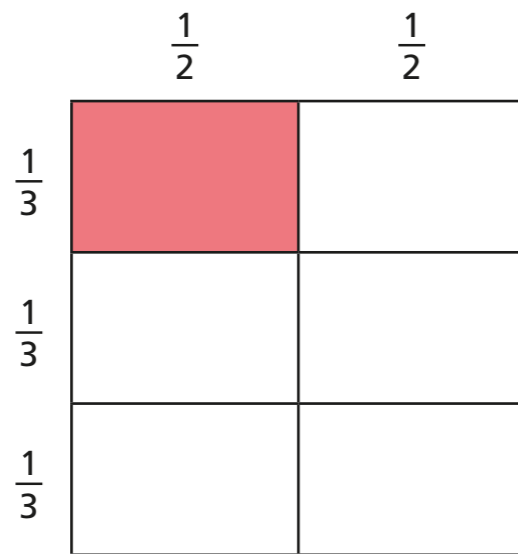


# Multiply fractions by fractions

- 1 Dexter works out  $\frac{1}{2} \times \frac{1}{3}$  using a grid method.



Explain how this shows  $\frac{1}{2} \times \frac{1}{3} = \frac{1}{6}$

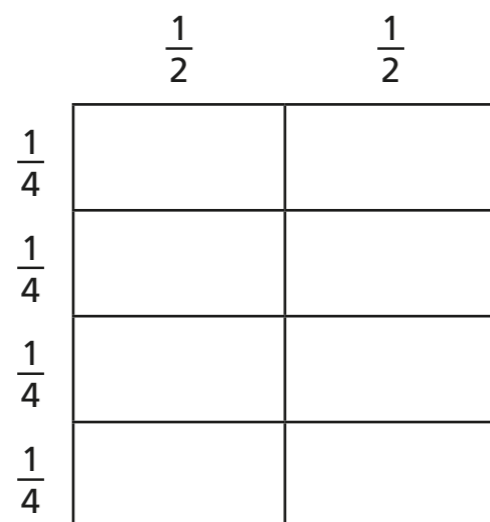
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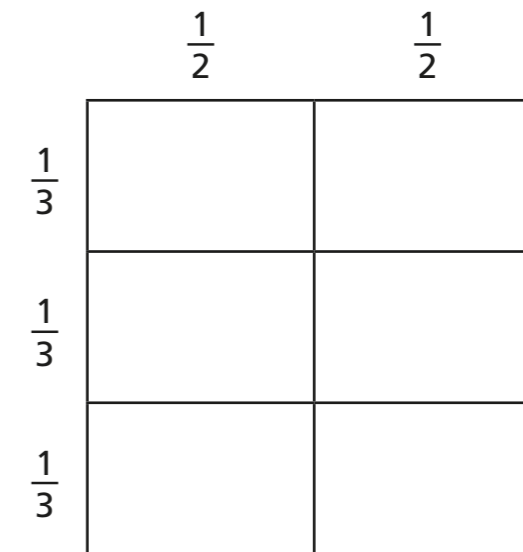
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- 2 Shade the diagrams to show the fraction multiplications.  
Complete the multiplications.

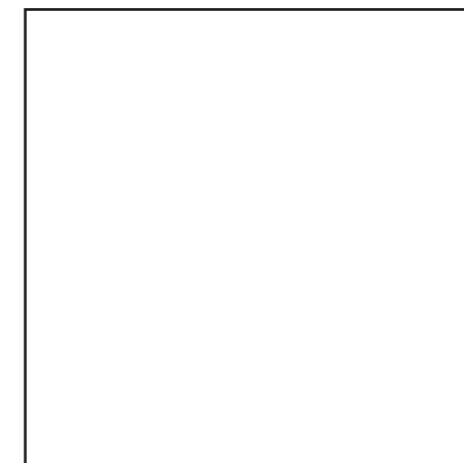
a)  $\frac{1}{2} \times \frac{1}{4} = \square$



b)  $\frac{1}{2} \times \frac{2}{3} = \square$



- 3 a) Divide the square to show that  $\frac{2}{3} \times \frac{3}{4}$  is equal to  $\frac{6}{12}$



b) Mo says  $\frac{2}{3} \times \frac{3}{4}$  is equal to  $\frac{1}{2}$

Is Mo correct? \_\_\_\_\_

Explain your answer.

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4 Complete the calculations.

a)  $\frac{1}{4} \times \frac{1}{5} =$

e)  $\frac{3}{4} \times \frac{1}{5} =$

b)  $\frac{1}{5} \times \frac{1}{6} =$

f)  $\frac{2}{5} \times \frac{5}{6} =$

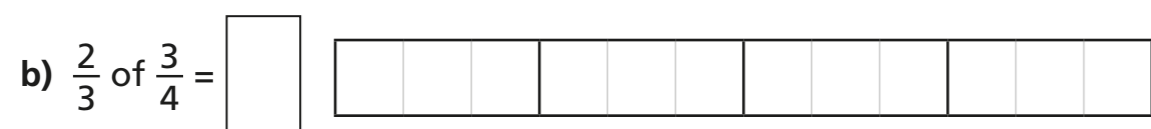
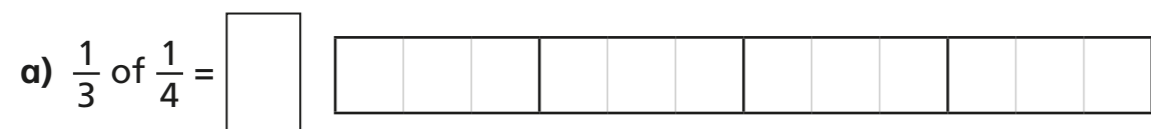
c)   $= \frac{1}{7} \times \frac{1}{8}$

g)  $\frac{5}{7} \times \frac{5}{8} =$

d)  $\frac{1}{8} \times \frac{1}{9} \times \frac{1}{10} =$

h)  $\frac{3}{8} \times \frac{2}{9} \times \frac{3}{10} =$

5 Use the diagram to complete the calculations.



c) What do you notice about your answers?  
Talk to your partner.

6 Fill in the missing numbers.

a)  $\frac{1}{10} = \frac{1}{2} \times \frac{1}{\text{input}}$

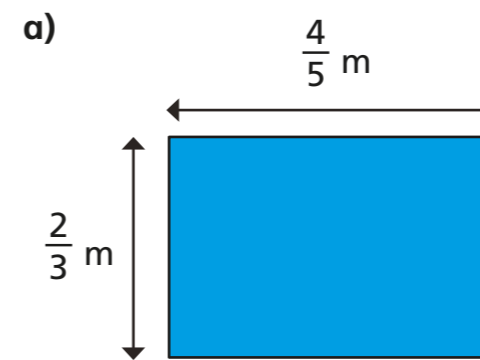
b)  $\frac{1}{5} \times \frac{\text{input}}{3} = \frac{2}{15}$

7 Fill in the missing numbers.

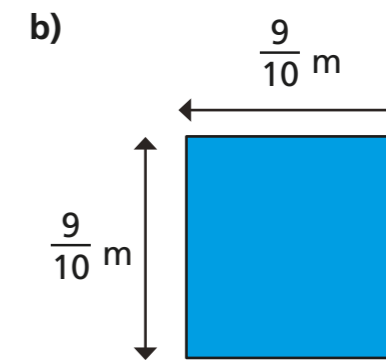
a)  $\frac{1}{10} = \frac{\text{input}}{4} \times \frac{\text{input}}{5}$

b)  $\frac{1}{4} = \frac{\text{input}}{4} \times \frac{\text{input}}{5}$

8 Calculate the area of the shapes.



Area =  m<sup>2</sup>



Area =  m<sup>2</sup>

9 Work out the area of the shaded part.

