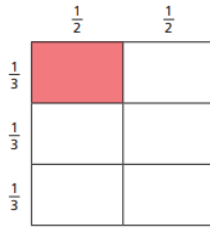


## Multiply fractions by fractions

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

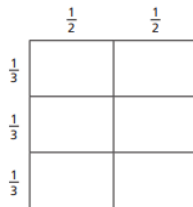
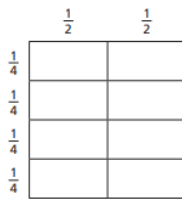


Explain how this shows  $\frac{1}{2} \times \frac{1}{3} = \frac{1}{6}$

- 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) Use the grid method 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.

- 4 Complete the calculations.

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

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

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

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

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

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

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

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

- 5 Use the diagram to complete the calculations.

a)  $\frac{1}{3}$  of  $\frac{1}{4}$

b)  $\frac{2}{3}$  of  $\frac{3}{4}$

- c) What do you notice about your answers?

Talk to your partner.

## Multiply fractions by integers

- 3 a) Use the grid method 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.

- 4 Complete the calculations.

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

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

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

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

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

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

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

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

- 5 Use the diagram to complete the calculations.

a)  $\frac{1}{3}$  of  $\frac{1}{4}$

b)  $\frac{2}{3}$  of  $\frac{3}{4}$

- c) What do you notice about your answers?

Talk to your partner.

- 6 Fill in the missing numbers.

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

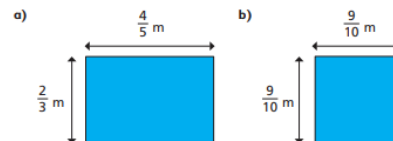
b)  $\frac{1}{5} \times \frac{\square}{3} = \frac{2}{15}$

- 7 Fill in the missing numbers.

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

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

- 8 Calculate the area of the shapes.



- 9 Work out the area of the shaded part.

