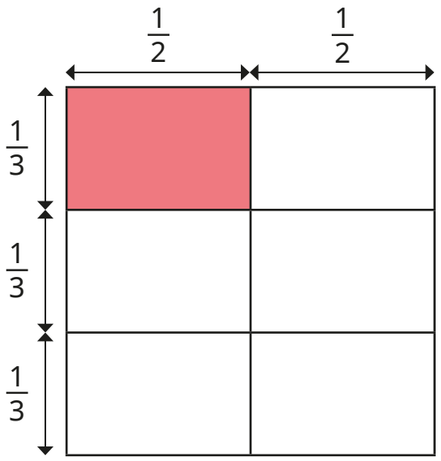
Multiply fractions by fractions

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

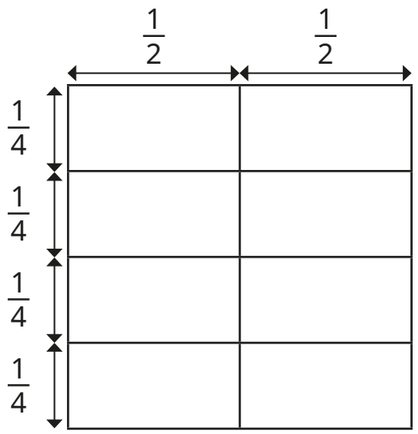


Explain how this shows $\frac{1}{2} \times \frac{1}{3} = \frac{1}{6}$

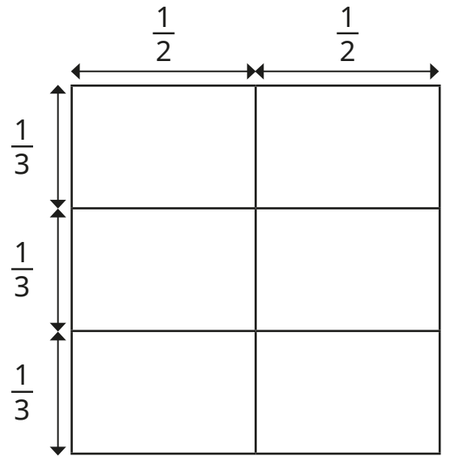
2 Shade the diagrams to show the fraction multiplications.

Complete the multiplications.

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

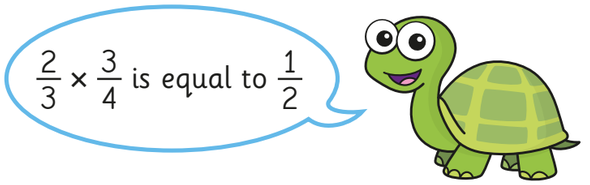


b) $\frac{1}{2} \times \frac{2}{3} =$ ☐



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

b)



Is Tiny correct? _____

Explain your answer.

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4 Complete the calculations.

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

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

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

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

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

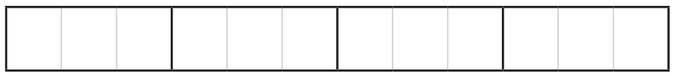
f) $\frac{2}{5} \times \frac{5}{6} = \square$

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

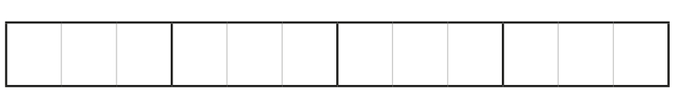
h) $\frac{3}{8} \times \frac{2}{9} \times \frac{3}{10} = \square$

5 Use the diagrams to complete the calculations.

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



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



What do you notice about your answers?

6 Fill in the missing numbers.

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

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

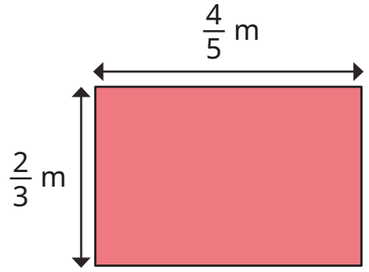
7 Fill in the missing numbers.

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

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

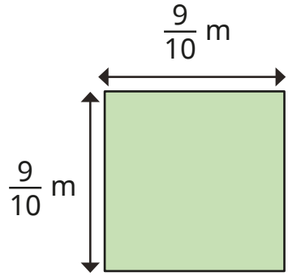
8 Calculate the areas of the shapes.

a)



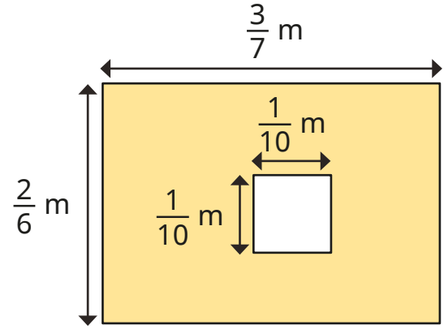
area = $\square$ m^2

b)



area = $\square$ m^2

9 Work out the area of the shaded part.



$\square$ m^2

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