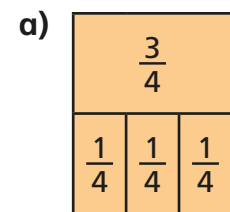


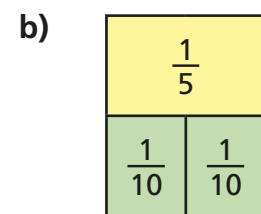
Divide a fraction by a unit fraction

1 Use the bar models to answer the questions and complete the calculations.



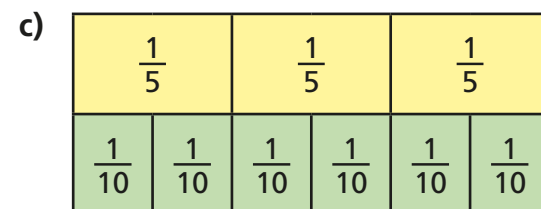
How many quarters are there in three-quarters? 3

$$\frac{3}{4} \div \frac{1}{4} = \boxed{3}$$



How many tenths are there in one-fifth? 2

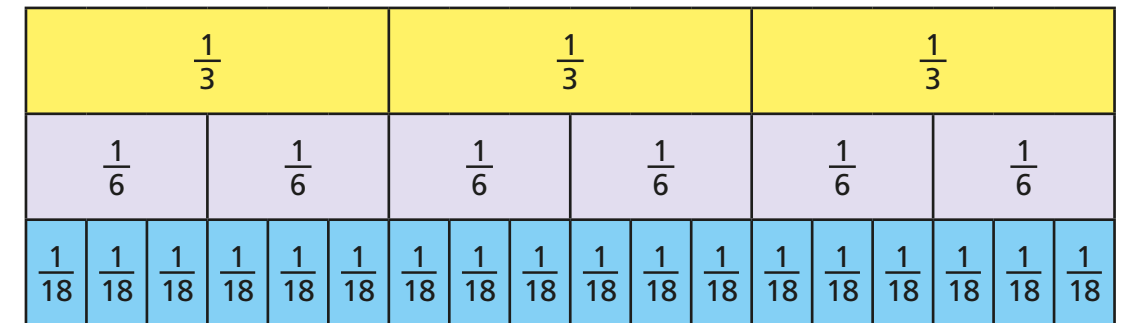
$$\frac{1}{5} \div \frac{1}{10} = \boxed{2}$$



How many tenths are there in three-fifths? 6

$$\frac{3}{5} \div \frac{1}{10} = \boxed{6}$$

2 Use the fraction wall to complete the calculations.



a) $\frac{1}{3} \div \frac{1}{6} = \boxed{2}$

d) $\frac{2}{3} \div \frac{1}{18} = \boxed{12}$

b) $\frac{1}{3} \div \frac{1}{18} = \boxed{6}$

e) $\frac{5}{3} \div \frac{1}{18} = \boxed{30}$

c) $\frac{2}{3} \div \frac{1}{6} = \boxed{4}$

Use the fraction wall, and the fact that $\frac{2}{18} = \frac{1}{9}$, to help you complete the calculations.

f) $\frac{1}{3} \div \frac{1}{9} = \boxed{3}$

g) $\frac{2}{3} \div \frac{1}{9} = \boxed{6}$

3 Complete the calculations.

Draw diagrams to help you.

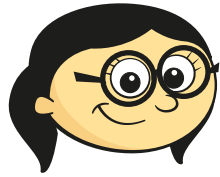
a) $\frac{2}{3} \div \frac{1}{6} = \boxed{4}$

b) $\frac{2}{3} \div \frac{1}{12} = \boxed{8}$

c) $\frac{3}{4} \div \frac{1}{12} = \boxed{9}$



4



$\frac{1}{2} \div \frac{1}{8}$ is
greater than $\frac{1}{2} \div \frac{1}{4}$

Draw diagrams to show Annie is correct.



5

Write $<$, $>$ or $=$ to compare the statements.

$$\frac{1}{3} \div \frac{1}{12} \quad < \quad \frac{1}{3} \div \frac{1}{18}$$

$$\frac{1}{3} \div \frac{1}{12} \quad > \quad \frac{1}{4} \div \frac{1}{12}$$

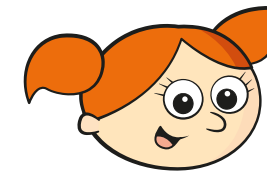
$$\frac{1}{3} \div \frac{1}{12} \quad < \quad \frac{2}{3} \div \frac{1}{12}$$

$$\frac{1}{3} \div \frac{1}{12} \quad > \quad \frac{1}{3} \times \frac{1}{12}$$

6

Alex divides by unit fractions using equivalent fractions.

Here is Alex's method.



$$\begin{aligned} \frac{2}{3} \div \frac{1}{9} \\ &= \frac{6}{9} \div \frac{1}{9} \\ &= 6 \div 1 \\ &= 6 \end{aligned}$$

Use Alex's method to complete the calculations.

$$\text{a) } \frac{3}{4} \div \frac{1}{8} = \frac{\boxed{6}}{8} \div \frac{1}{8} = \boxed{6} \div 1 = \boxed{6}$$

$$\text{b) } \frac{3}{4} \div \frac{1}{12} = \frac{\boxed{9}}{\boxed{12}} \div \frac{1}{12} = \boxed{9} \div 1 = \boxed{9}$$

$$\text{c) } \frac{3}{4} \div \frac{1}{20} = \frac{\boxed{15}}{\boxed{20}} \div \frac{1}{20} = \boxed{15} \div \boxed{1} = \boxed{15}$$

7

Solve the equations.

$$\text{a) } \frac{1}{15} a = \frac{1}{3}$$

$$\text{c) } \frac{1}{33} c = \frac{6}{11}$$

$$a = \boxed{5}$$

$$c = \boxed{18}$$

$$\text{b) } \frac{1}{10} b = \frac{1}{2}$$

$$\text{d) } \frac{1}{12} d = \frac{5}{6}$$

$$b = \boxed{5}$$

$$d = \boxed{10}$$

