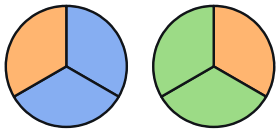
Names (pair) _____ Date _____

Dividing a Whole Number by a Fraction

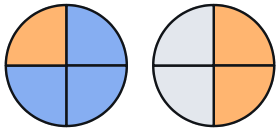
Example



How many times does $\frac{2}{3}$ fit into 2? We colour groups of two thirds in one colour: there are 3.

$$2 \div \frac{2}{3} = 3$$

Example



Groups of three quarters: two are full and 2 pieces are left (grey).

A group has 3 pieces, so 2 pieces are $\frac{2}{3}$ of a group.

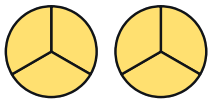
$$2 \div \frac{3}{4} = 2\frac{2}{3} = 2 \times \frac{4}{3}$$

Remember

Dividing by a fraction is the same as **multiplying by its reciprocal** (the numerator and denominator swap places): $2 \div \frac{3}{4} = 2 \times \frac{4}{3} = \frac{8}{3} = 2\frac{2}{3}$.

1 ON YOUR OWN Circle the groups and write how many there are. Write the leftover as part of a group.

a)



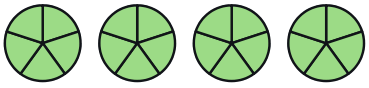
$2 \div \frac{2}{3} = \square$

b)



$3 \div \frac{3}{4} = \square$

c)



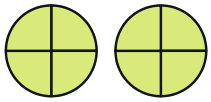
$4 \div \frac{2}{5} = \square$

d)



$3 \div \frac{3}{5} = \square$

e)



$2 \div \frac{3}{4} = \square \frac{\square}{\square}$

f)



$3 \div \frac{2}{3} = \square \frac{\square}{\square}$

Names (group) _____ Date _____

2 IN PAIRS **The reciprocal.** One student writes the reciprocal, the other multiplies. Swap roles in every row.

$4 \div \frac{2}{3} = 4 \times \frac{\square}{\square} = \square$ $\quad$ $6 \div \frac{3}{4} = 6 \times \frac{\square}{\square} = \square$

$5 \div \frac{5}{6} = 5 \times \frac{\square}{\square} = \square$ $\quad$ $3 \div \frac{2}{5} = 3 \times \frac{\square}{\square} = \square$

$2 \div \frac{4}{5} = 2 \times \frac{\square}{\square} = \square$ $\quad$ $5 \div \frac{3}{8} = 5 \times \frac{\square}{\square} = \square$

3 IN A GROUP **Stories.** Write the division, work it out and answer. Watch out for the last story!

From 6 l of water we fill bottles of $\frac{3}{4}$ l. How many bottles do we fill?

Answer: _____

A 4 km track is divided into sections of $\frac{2}{5}$ km. How many sections are there?

Answer: _____

We have 3 kg of flour. One cake needs $\frac{2}{3}$ kg. How many whole cakes can we bake?

Answer: _____

★ ON YOUR OWN **Exit card.** $3 \div \frac{3}{5} = 3 \times \frac{\square}{\square} = \square$