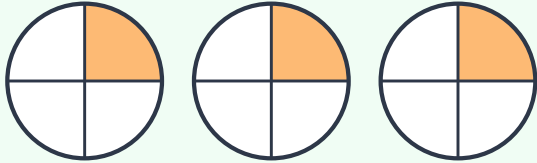


Dividing Unit Fractions

A fraction is a division. Share equally.

Example

3 pizzas are shared equally by 4 friends.



 = 1 friend's share

Cut each pizza into 4 equal slices.

Each friend gets 3 slices of $\frac{1}{4}$.

$$3 \div 4 = \frac{3}{4} \text{ of a pizza each}$$

Shade one share. Write the division and the fraction.

1. 2 sandwiches, 3 kids



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

2. 3 pies, 5 friends



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

3. 2 waffles, 5 kids



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

Share equally. Write a fraction and a mixed number.

Example

3 kids share 7 granola bars.

$$7 \div 3 = \frac{7}{3} = 2 \frac{1}{3}$$

It is between **2** and **3**

4. 4 friends share 13 cookies.

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

It is between and

5. 5 kids share 12 feet of ribbon.

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

It is between and

6. 2 sisters share 15 pancakes.

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

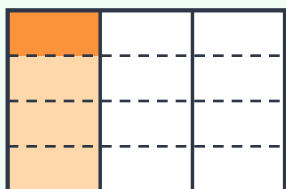
It is between and

Dividing Unit Fractions

Cut the unit fraction into equal pieces. Check by multiplying.

Shade 1 piece of the shaded part. What part of the whole is it?

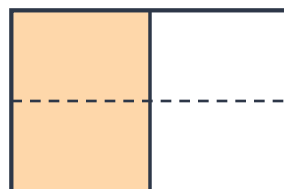
Example



Pieces in all: **12**

$$\frac{1}{3} \div 4 = \frac{1}{12}$$

1.



Pieces in all:

$$\frac{1}{2} \div 2 = \frac{\quad}{\quad}$$

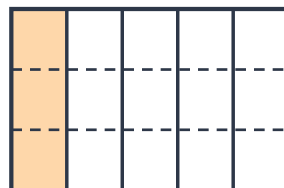
2.



Pieces in all:

$$\frac{1}{6} \div 3 = \frac{\quad}{\quad}$$

3.



Pieces in all:

$$\frac{1}{5} \div 3 = \frac{\quad}{\quad}$$

Divide. Then check by multiplying.

Example

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

Check: $\frac{1}{10} \times 5 = \frac{5}{10} = \frac{1}{2}$

4.

$$\frac{1}{7} \div 3 = \frac{\quad}{\quad}$$

Check: $\frac{\quad}{\quad} \times 3 = \frac{\quad}{\quad} = \frac{1}{7}$

5.

$$\frac{1}{4} \div 5 = \frac{\quad}{\quad}$$

Check: $\frac{\quad}{\quad} \times 5 = \frac{\quad}{\quad} = \frac{1}{4}$

6.

$$\frac{1}{8} \div 2 = \frac{\quad}{\quad}$$

Check: $\frac{\quad}{\quad} \times 2 = \frac{\quad}{\quad} = \frac{1}{8}$

Dividing Unit Fractions

How many unit fractions are in the whole number? Check.

Draw the jumps or count the parts. Then divide and check.

Example How many $\frac{1}{3}$ are in 4?



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

Check: $\boxed{12} \times \frac{1}{3} = \frac{\boxed{12}}{\boxed{3}} = 4$

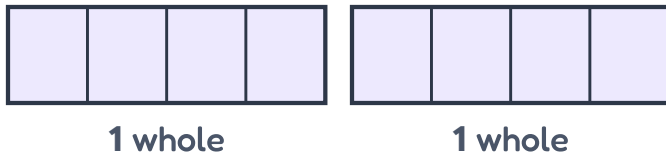
1. How many $\frac{1}{2}$ are in 3?



$$3 \div \frac{1}{2} = \boxed{}$$

Check: $\boxed{} \times \frac{1}{2} = \frac{\boxed{}}{\boxed{}} = 3$

2. How many $\frac{1}{4}$ are in 2?



$$2 \div \frac{1}{4} = \boxed{}$$

Check: $\boxed{} \times \frac{1}{4} = \frac{\boxed{}}{\boxed{}} = 2$

3. How many $\frac{1}{5}$ are in 2?



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

Check: $\boxed{} \times \frac{1}{5} = \frac{\boxed{}}{\boxed{}} = 2$

4. How many $\frac{1}{3}$ are in 3?



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

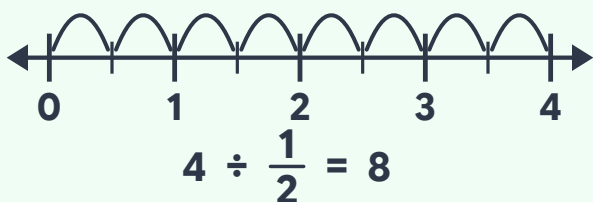
Check: $\boxed{} \times \frac{1}{3} = \frac{\boxed{}}{\boxed{}} = 3$

Dividing Unit Fractions

Write the division, find the missing numbers, and check.

Write the division equation each model shows.

Example



1.



2.



3.



Circle the division the model shows.

4.



$2 \div \frac{1}{3}$ $\frac{1}{3} \div 2$ $\frac{1}{3} \div 3$

5.



$\frac{1}{2} \div 2$ $2 \div \frac{1}{4}$ $2 \div \frac{1}{2}$

Find the missing number. Check it with the multiplication.

Example

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

$$\frac{1}{12} \times \boxed{3} = \frac{1}{4}$$

6.

$$\boxed{} \div \frac{1}{5} = 20$$

$$20 \times \frac{1}{5} = \boxed{}$$

7.

$$6 \div \frac{\boxed{}}{\boxed{}} = 12$$

$$12 \times \frac{\boxed{}}{\boxed{}} = 6$$

8.

$$\frac{\boxed{}}{\boxed{}} \div 5 = \frac{1}{15}$$

$$\frac{1}{15} \times 5 = \frac{\boxed{}}{\boxed{}}$$

Dividing Unit Fractions

Solve. Write a division equation, then the answer.

Example Mia needs 3 cups of flour.
Her scoop holds $\frac{1}{4}$ cup. How many
scoops does she need?

Equation: $3 \div \frac{1}{4} = 12$

Answer: 12 scoops

1. 3 friends share $\frac{1}{2}$ pound of cheese
equally. How much cheese does
each friend get?

Equation: _____

Answer: _____ pound

2. One lap around the park is $\frac{1}{3}$ mile.
How many laps make 2 miles?

Equation: _____

Answer: _____ laps

3. Ana cuts 5 yards of ribbon into
pieces $\frac{1}{2}$ yard long. How many
pieces does she get?

Equation: _____

Answer: _____ pieces

4. 3 kids share $\frac{1}{3}$ of a pan of brownies
equally. What part of the whole
pan does each kid get?

Equation: _____

Answer: _____ of the pan

5. Leo has 6 bags of soil. Each pot
needs $\frac{1}{5}$ of a bag. How many pots
can he fill?

Equation: _____

Answer: _____ pots

6. 2 brothers share $\frac{1}{4}$ of a pizza
equally. What part of the whole
pizza does each one get?

Equation: _____

Answer: _____ of the pizza

7. $\frac{1}{2}$ gallon of juice is poured equally
into 6 glasses. How much juice is in
each glass?

Equation: _____

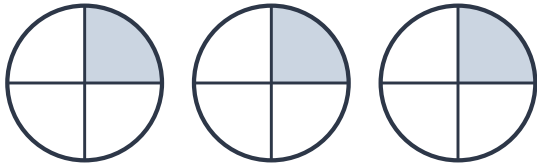
Answer: _____ gallon

Dividing Unit Fractions

A fraction is a division. Share equally.

Example

3 pizzas are shared equally by 4 friends.



 = 1 friend's share

Cut each pizza into 4 equal slices.

Each friend gets 3 slices of $\frac{1}{4}$.

$$3 \div 4 = \frac{3}{4} \text{ of a pizza each}$$

Shade one share. Write the division and the fraction.

1. 2 sandwiches, 3 kids



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

2. 3 pies, 5 friends



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

3. 2 waffles, 5 kids



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

Share equally. Write a fraction and a mixed number.

Example

3 kids share 7 granola bars.

$$7 \div 3 = \frac{7}{3} = 2 \frac{1}{3}$$

It is between **2** and **3**

4. 4 friends share 13 cookies.

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

It is between and

5. 5 kids share 12 feet of ribbon.

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

It is between and

6. 2 sisters share 15 pancakes.

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

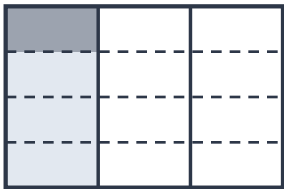
It is between and

Dividing Unit Fractions

Cut the unit fraction into equal pieces. Check by multiplying.

Shade 1 piece of the shaded part. What part of the whole is it?

Example



Pieces in all: **12**

$$\frac{1}{3} \div 4 = \frac{1}{12}$$

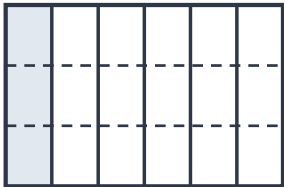
1.



Pieces in all:

$$\frac{1}{2} \div 2 = \frac{\quad}{\quad}$$

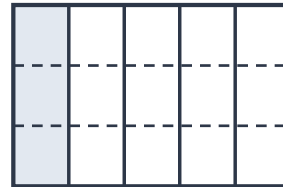
2.



Pieces in all:

$$\frac{1}{6} \div 3 = \frac{\quad}{\quad}$$

3.



Pieces in all:

$$\frac{1}{5} \div 3 = \frac{\quad}{\quad}$$

Divide. Then check by multiplying.

Example

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

Check: $\frac{1}{10} \times 5 = \frac{5}{10} = \frac{1}{2}$

4.

$$\frac{1}{7} \div 3 = \frac{\quad}{\quad}$$

Check: $\frac{\quad}{\quad} \times 3 = \frac{\quad}{\quad} = \frac{1}{7}$

5.

$$\frac{1}{4} \div 5 = \frac{\quad}{\quad}$$

Check: $\frac{\quad}{\quad} \times 5 = \frac{\quad}{\quad} = \frac{1}{4}$

6.

$$\frac{1}{8} \div 2 = \frac{\quad}{\quad}$$

Check: $\frac{\quad}{\quad} \times 2 = \frac{\quad}{\quad} = \frac{1}{8}$

Dividing Unit Fractions

How many unit fractions are in the whole number? Check.

Draw the jumps or count the parts. Then divide and check.

Example How many $\frac{1}{3}$ are in 4?



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

Check: $\boxed{12} \times \frac{1}{3} = \frac{\boxed{12}}{\boxed{3}} = 4$

1. How many $\frac{1}{2}$ are in 3?



$$3 \div \frac{1}{2} = \boxed{}$$

Check: $\boxed{} \times \frac{1}{2} = \frac{\boxed{}}{\boxed{}} = 3$

2. How many $\frac{1}{4}$ are in 2?



$$2 \div \frac{1}{4} = \boxed{}$$

Check: $\boxed{} \times \frac{1}{4} = \frac{\boxed{}}{\boxed{}} = 2$

3. How many $\frac{1}{5}$ are in 2?



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

Check: $\boxed{} \times \frac{1}{5} = \frac{\boxed{}}{\boxed{}} = 2$

4. How many $\frac{1}{3}$ are in 3?



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

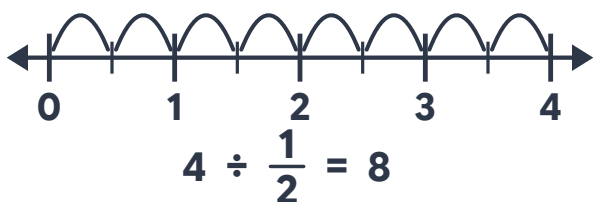
Check: $\boxed{} \times \frac{1}{3} = \frac{\boxed{}}{\boxed{}} = 3$

Dividing Unit Fractions

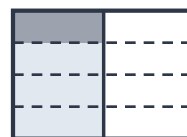
Write the division, find the missing numbers, and check.

Write the division equation each model shows.

Example



1.



2.



3.



Circle the division the model shows.

4.



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

5.



$$\frac{1}{2} \div 2 \quad 2 \div \frac{1}{4} \quad 2 \div \frac{1}{2}$$

Find the missing number. Check it with the multiplication.

Example

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

$$\frac{1}{12} \times \boxed{3} = \frac{1}{4}$$

6.

$$\boxed{} \div \frac{1}{5} = 20$$

$$20 \times \frac{1}{5} = \boxed{}$$

7.

$$6 \div \frac{\boxed{}}{\boxed{}} = 12$$

$$12 \times \frac{\boxed{}}{\boxed{}} = 6$$

8.

$$\frac{\boxed{}}{\boxed{}} \div 5 = \frac{1}{15}$$

$$\frac{1}{15} \times 5 = \frac{\boxed{}}{\boxed{}}$$

Dividing Unit Fractions

Solve. Write a division equation, then the answer.

Example

Mia needs 3 cups of flour.
Her scoop holds $\frac{1}{4}$ cup. How many
scoops does she need?

Equation: $3 \div \frac{1}{4} = 12$

Answer: 12 scoops

1. 3 friends share $\frac{1}{2}$ pound of cheese
equally. How much cheese does
each friend get?

Equation: _____

Answer: _____ pound

2. One lap around the park is $\frac{1}{3}$ mile.
How many laps make 2 miles?

Equation: _____

Answer: _____ laps

3. Ana cuts 5 yards of ribbon into
pieces $\frac{1}{2}$ yard long. How many
pieces does she get?

Equation: _____

Answer: _____ pieces

4. 3 kids share $\frac{1}{3}$ of a pan of brownies
equally. What part of the whole
pan does each kid get?

Equation: _____

Answer: _____ of the pan

5. Leo has 6 bags of soil. Each pot
needs $\frac{1}{5}$ of a bag. How many pots
can he fill?

Equation: _____

Answer: _____ pots

6. 2 brothers share $\frac{1}{4}$ of a pizza
equally. What part of the whole
pizza does each one get?

Equation: _____

Answer: _____ of the pizza

7. $\frac{1}{2}$ gallon of juice is poured equally
into 6 glasses. How much juice is in
each glass?

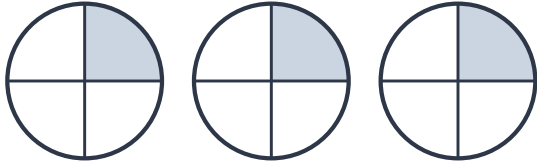
Equation: _____

Answer: _____ gallon

Dividing Unit Fractions

A fraction is a division. Share equally.

Example 3 pizzas are shared equally by 4 friends.



 = 1 friend's share

Cut each pizza into 4 equal slices.

Each friend gets 3 slices of $\frac{1}{4}$.

$$3 \div 4 = \frac{3}{4} \text{ of a pizza each}$$

Shade one share. Write the division and the fraction.

1. 2 sandwiches, 3 kids



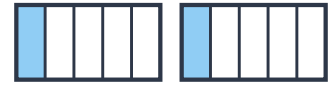
$$2 \div 3 = \frac{2}{3}$$

2. 3 pies, 5 friends



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

3. 2 waffles, 5 kids



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

Share equally. Write a fraction and a mixed number.

Example 3 kids share 7 granola bars.

$$7 \div 3 = \frac{7}{3} = 2 \frac{1}{3}$$

It is between 2 and 3

4. 4 friends share 13 cookies.

$$13 \div 4 = \frac{13}{4} = 3 \frac{1}{4}$$

It is between 3 and 4

5. 5 kids share 12 feet of ribbon.

$$12 \div 5 = \frac{12}{5} = 2 \frac{2}{5}$$

It is between 2 and 3

6. 2 sisters share 15 pancakes.

$$15 \div 2 = \frac{15}{2} = 7 \frac{1}{2}$$

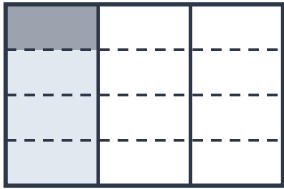
It is between 7 and 8

Dividing Unit Fractions

Cut the unit fraction into equal pieces. Check by multiplying.

Shade 1 piece of the shaded part. What part of the whole is it?

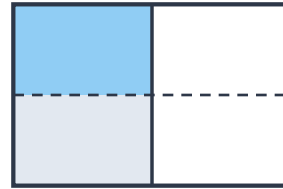
Example



Pieces in all: **12**

$$\frac{1}{3} \div 4 = \frac{1}{12}$$

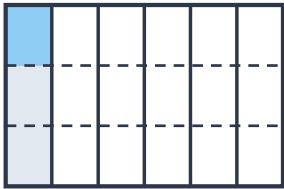
1.



Pieces in all: **4**

$$\frac{1}{2} \div 2 = \frac{1}{4}$$

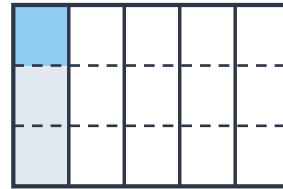
2.



Pieces in all: **18**

$$\frac{1}{6} \div 3 = \frac{1}{18}$$

3.



Pieces in all: **15**

$$\frac{1}{5} \div 3 = \frac{1}{15}$$

Divide. Then check by multiplying.

Example

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

Check: $\frac{1}{10} \times 5 = \frac{5}{10} = \frac{1}{2}$

4.

$$\frac{1}{7} \div 3 = \frac{1}{21}$$

Check: $\frac{1}{21} \times 3 = \frac{3}{21} = \frac{1}{7}$

5.

$$\frac{1}{4} \div 5 = \frac{1}{20}$$

Check: $\frac{1}{20} \times 5 = \frac{5}{20} = \frac{1}{4}$

6.

$$\frac{1}{8} \div 2 = \frac{1}{16}$$

Check: $\frac{1}{16} \times 2 = \frac{2}{16} = \frac{1}{8}$

Dividing Unit Fractions

How many unit fractions are in the whole number? Check.

Draw the jumps or count the parts. Then divide and check.

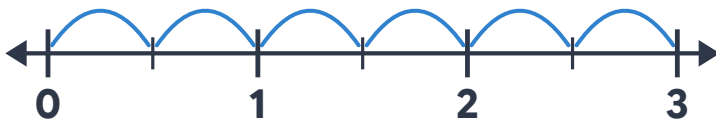
Example How many $\frac{1}{3}$ are in 4?



$$4 \div \frac{1}{3} = 12$$

Check: $12 \times \frac{1}{3} = \frac{12}{3} = 4$

1. How many $\frac{1}{2}$ are in 3?



$$3 \div \frac{1}{2} = 6$$

Check: $6 \times \frac{1}{2} = \frac{6}{2} = 3$

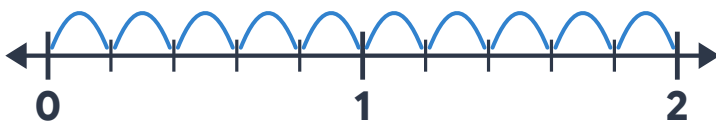
2. How many $\frac{1}{4}$ are in 2?



$$2 \div \frac{1}{4} = 8$$

Check: $8 \times \frac{1}{4} = \frac{8}{4} = 2$

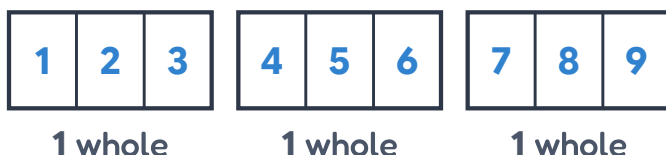
3. How many $\frac{1}{5}$ are in 2?



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

Check: $10 \times \frac{1}{5} = \frac{10}{5} = 2$

4. How many $\frac{1}{3}$ are in 3?



$$3 \div \frac{1}{3} = 9$$

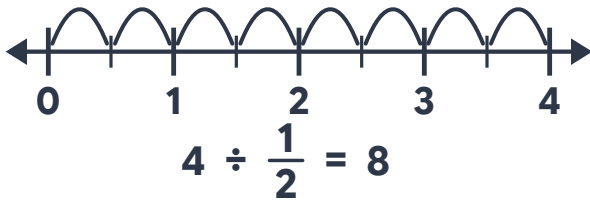
Check: $9 \times \frac{1}{3} = \frac{9}{3} = 3$

Dividing Unit Fractions

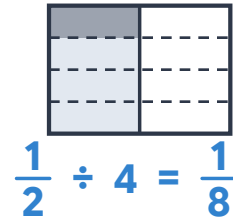
Write the division, find the missing numbers, and check.

Write the division equation each model shows.

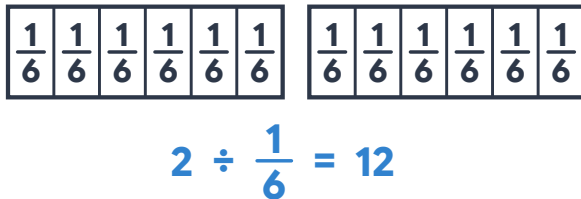
Example



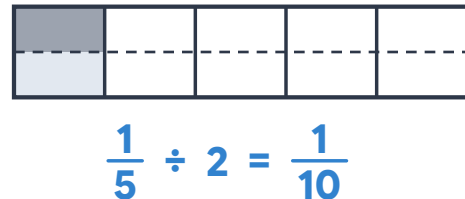
1.



2.



3.



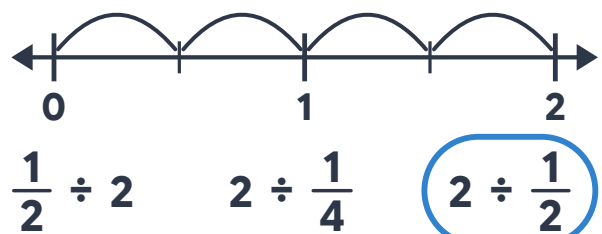
Circle the division the model shows.

4.



$2 \div \frac{1}{3}$ $\frac{1}{3} \div 2$ $\frac{1}{3} \div 3$

5.



Find the missing number. Check it with the multiplication.

Example

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

$$\frac{1}{12} \times \boxed{3} = \frac{1}{4}$$

6.

$$\boxed{4} \div \frac{1}{5} = 20$$

$$20 \times \frac{1}{5} = \boxed{4}$$

7.

$$6 \div \frac{\boxed{1}}{\boxed{2}} = 12$$

$$12 \times \frac{\boxed{1}}{\boxed{2}} = 6$$

8.

$$\frac{\boxed{1}}{\boxed{3}} \div 5 = \frac{1}{15}$$

$$\frac{1}{15} \times 5 = \frac{\boxed{1}}{\boxed{3}}$$

Dividing Unit Fractions

Solve. Write a division equation, then the answer.

Example Mia needs 3 cups of flour.
Her scoop holds $\frac{1}{4}$ cup. How many
scoops does she need?

Equation: $3 \div \frac{1}{4} = 12$

Answer: 12 scoops

1. 3 friends share $\frac{1}{2}$ pound of cheese
equally. How much cheese does
each friend get?

Equation: $\frac{1}{2} \div 3 = \frac{1}{6}$

Answer: $\frac{1}{6}$ pound

2. One lap around the park is $\frac{1}{3}$ mile.
How many laps make 2 miles?

Equation: $2 \div \frac{1}{3} = 6$

Answer: 6 laps

3. Ana cuts 5 yards of ribbon into
pieces $\frac{1}{2}$ yard long. How many
pieces does she get?

Equation: $5 \div \frac{1}{2} = 10$

Answer: 10 pieces

4. 3 kids share $\frac{1}{3}$ of a pan of brownies
equally. What part of the whole
pan does each kid get?

Equation: $\frac{1}{3} \div 3 = \frac{1}{9}$

Answer: $\frac{1}{9}$ of the pan

5. Leo has 6 bags of soil. Each pot
needs $\frac{1}{5}$ of a bag. How many pots
can he fill?

Equation: $6 \div \frac{1}{5} = 30$

Answer: 30 pots

6. 2 brothers share $\frac{1}{4}$ of a pizza
equally. What part of the whole
pizza does each one get?

Equation: $\frac{1}{4} \div 2 = \frac{1}{8}$

Answer: $\frac{1}{8}$ of the pizza

7. $\frac{1}{2}$ gallon of juice is poured equally
into 6 glasses. How much juice is in
each glass?

Equation: $\frac{1}{2} \div 6 = \frac{1}{12}$

Answer: $\frac{1}{12}$ gallon