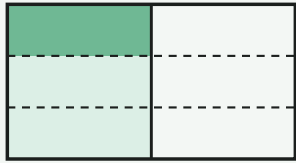


Divide a Unit Fraction by a Whole Number

Name: _____

Grade 5 · Share a unit fraction equally and name one share

How it works



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

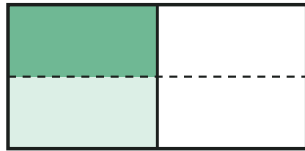
$\frac{1}{2} \div 3$ asks: if one half is shared equally among 3, how big is each share?

Cut each half into 3 equal pieces. Now the whole has $2 \times 3 = 6$ pieces, so one share is $\frac{1}{6}$ of the whole.

Multiply the denominator by the whole number.

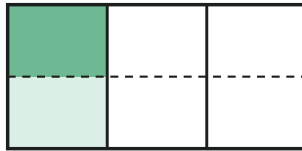
A. The shaded column is cut into equal shares. What fraction is one dark share?

1.



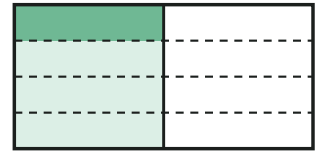
$$\frac{1}{2} \div 2 = \frac{\boxed{}}{\boxed{}}$$

2.



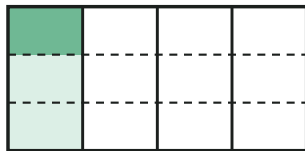
$$\frac{1}{3} \div 2 = \frac{\boxed{}}{\boxed{}}$$

3.



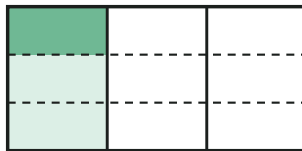
$$\frac{1}{4} \div 4 = \frac{\boxed{}}{\boxed{}}$$

4.



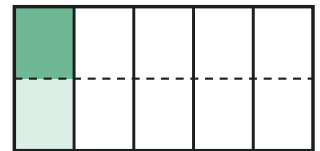
$$\frac{1}{4} \div 3 = \frac{\boxed{}}{\boxed{}}$$

5.



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

6.



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

B. Divide.

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

4. $\frac{1}{5} \div 3 = \frac{\boxed{}}{\boxed{}}$

7. $\frac{1}{2} \div 7 = \frac{\boxed{}}{\boxed{}}$

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

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

8. $\frac{1}{10} \div 3 = \frac{\boxed{}}{\boxed{}}$

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

6. $\frac{1}{8} \div 2 = \frac{\boxed{}}{\boxed{}}$

9. $\frac{1}{4} \div 6 = \frac{\boxed{}}{\boxed{}}$

C. Solve.

1. Half of a pizza is shared equally by 4 friends. What fraction of the whole pizza does each friend get?

$$\frac{\boxed{}}{\boxed{}}$$

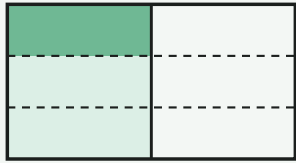
2. $\frac{1}{3}$ liter of juice is poured equally into 2 glasses. What fraction of a liter is in each glass?

$$\frac{\boxed{}}{\boxed{}}$$

Divide a Unit Fraction by a Whole Number (Answer Key)

Grade 5 · Share a unit fraction equally and name one share

How it works



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

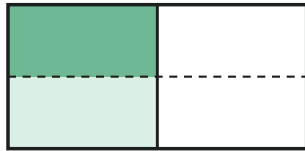
$\frac{1}{2} \div 3$ asks: if one half is shared equally among 3, how big is each share?

Cut each half into 3 equal pieces. Now the whole has $2 \times 3 = 6$ pieces, so one share is $\frac{1}{6}$ of the whole.

Multiply the denominator by the whole number.

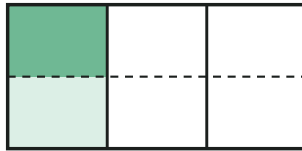
A. The shaded column is cut into equal shares. What fraction is one dark share?

1.



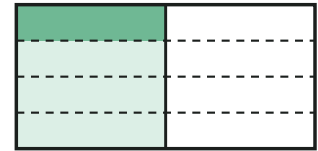
$$\frac{1}{2} \div 2 = \frac{1}{4}$$

2.



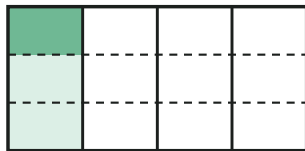
$$\frac{1}{3} \div 2 = \frac{1}{6}$$

3.



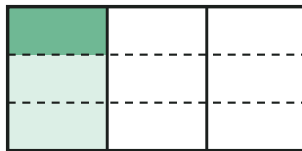
$$\frac{1}{4} \div 2 = \frac{1}{8}$$

4.



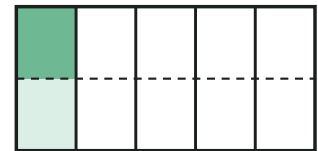
$$\frac{1}{4} \div 3 = \frac{1}{12}$$

5.



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

6.



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

B. Divide.

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

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

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

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

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

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

7. $\frac{1}{2} \div 7 = \frac{1}{14}$

8. $\frac{1}{10} \div 3 = \frac{1}{30}$

9. $\frac{1}{4} \div 6 = \frac{1}{24}$

C. Solve.

1. Half of a pizza is shared equally by 4 friends. What fraction of the whole pizza does each friend get?

$$\frac{1}{8}$$

2. $\frac{1}{3}$ liter of juice is poured equally into 2 glasses. What fraction of a liter is in each glass?

$$\frac{1}{6}$$